

Thesis

Labelling people as having personality disorder: Effects upon the attributions and intended behaviours of student mental health nurses.

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CONTENTS

	Page
LIST OF APPENDICES	1
LIST OF TABLES	2
LIST OF FIGURES	5
ACKNOWLEDGEMENTS	6
ABSTRACT	7
CHAPTER ONE: INTRODUCTION	9
1.1 Overview	9
1.1.1 Rationale and Aims of the Study	9
1.1.2 Overview of the Chapter	11
1.2 Personality Disorder	11
1.2.1 History of personality disorder	11
1.2.2 Definitions of personality disorder	13
1.2.3 Prevalence rates of personality disorder	17
1.2.3.1 <i>Community populations</i>	17
1.2.3.2 <i>Clinical and forensic populations</i>	18
1.2.4 Limitations of the Diagnostic Criteria	19
1.3 Personality Disorder in the Mental Health Service	23
1.3.1 Service provision	23
1.3.2 Current attitudes of healthcare professionals towards clients with a diagnosis of personality disorder	24
1.3.3 Attitudes of healthcare professionals towards clients with other psychiatric diagnoses	26

1.3.4 Challenges to healthcare professionals working with individuals with personality disorder	28
1.3.5 Stigma associated with the personality disorder label	29
1.3.6 The impact of negative and stigmatising attitudes	30
1.4 Theoretical Models of Attributions, Stigma and Associated Behaviours	31
1.4.1 Early models of stigma and labelling	32
1.4.2 Generic social cognitive models of stigma	33
1.4.3 Attribution theory	34
<i>1.4.3.1 Heider (1959)</i>	34
<i>1.4.3.2 Correspondent inference theory (Jones & Davis, 1966)</i>	35
<i>1.4.3.3 Kelley (1973)</i>	36
<i>1.4.3.4 Wiener's (1980, 1985, 1986, 1995) theory of causal attribution</i>	38
<i>1.4.3.5 Attribution model of public discrimination towards a person with a mental illness (Corrigan et al., (2003)</i>	41
1.5 Review of the Current Literature	44
1.5.1 Method	45
1.5.2 Results	46
1.5.3 Discussion	49
<i>1.5.3.1 Attitudes towards the diagnostic label of personality disorder: Vignette Research</i>	49
<i>1.5.3.1.1 Nursing staff</i>	49
<i>1.5.3.1.2 Other clinical staff</i>	53
<i>1.5. 3.2 Attitudes towards clients with personality disorder: Attitudes to specific service users under the care of clinicians</i>	55
<i>1.5.3.3 How attitudes affect clinical practice</i>	57

1.5.4 Conclusion	59
1.5.4.1 <i>Summary of attitudes to personality disorder</i>	59
1.5.4.2 <i>Quality of the research</i>	59
1.5.4.3 <i>Applicability of attribution theories</i>	61
1.6 Rationale for the present study	61
1.7 Research Hypotheses	63
CHAPTER TWO: METHOD	65
2.1 Overview of the Chapter	65
2.2 Design	65
2.3 Participants	66
2.3.1 Inclusion criteria	67
2.3.2 Rationale for selection of participants	67
2.3.3 Sample size	68
2.3.4 Recruitment	69
2.4 Materials and Measures	70
2.4.1 Overview	70
2.4.2 Videos	70
2.4.3. Demographic information	73
2.4.4. Attribution questionnaire (AQ-27) as adapted by Strong (2010)	73
2.4.5 Perceived dangerousness scale (Angermeyer, Matschinger & Corrigan, 2004)	75
2.4.6 Social distance scale (Link, Cullen, Frank & Woznaik, 1987, as adapted by Hay, 2007)	76
2.5 Ethical Considerations	77
2.5.1 Ethical Approval	77

2.5.2 Consent	77
2.5.3 Confidentiality	77
2.5.4 Coercion	78
2.5.5 Deception	78
2.5.6 Debriefing	79
2.5.7 Distress	79
2.5.8 Data storage	80
2.6 Data Collection Procedure	80
2.7 Plan of Analysis	82
2.7.1 Preliminary analysis and descriptive statistics	82
2.7.2 Statistical analysis of study hypotheses	82
3.7.2.1 Hypothesis one	82
3.7.2.2 Hypothesis two	83
3.7.2.3 Hypothesis three	86
3.7.2.4 Hypothesis four	87
CHAPTER THREE: RESULTS	88
3.1 Overview of the Chapter	88
3.2 Sample Characteristics	88
3.2.1 Response rate	88
3.2.2 Sample characteristics	89
3.3. Preliminary Analyses	93
3.3.1 Internal reliability of measures	93
3.3.2 Order effects	95
3.3.3 Normality testing	96
3.4 Hypothesis Testing	97

3.4.1 Hypothesis one	97
3.4.1.1 <i>Dangerousness</i>	97
3.4.1.2 <i>Controllability</i>	98
3.4.1.3 <i>Summary of results for hypothesis one</i>	99
3.4.2 Hypothesis two	100
3.4.2.1 <i>Anger</i>	100
3.4.2.2 <i>Pity</i>	102
3.4.2.3 <i>Fear</i>	104
3.4.2.4 <i>Summary of results for hypothesis two</i>	106
3.4.3. Hypothesis three	106
3.4.3.1 <i>Help</i>	106
3.4.3.2 <i>Coercion</i>	109
3.4.3.3 <i>Social Distance</i>	110
3.4.3.4 <i>Summary of results for hypothesis three</i>	111
3.4.4 Hypothesis four	112
3.4.4.1 <i>Schizophrenia prosocial group</i>	112
3.4.4.2 <i>Personality disorder prosocial group</i>	114
3.4.4.3 <i>Schizophrenia antisocial group</i>	115
3.4.4.4 <i>Personality disorder antisocial group</i>	116
3.4.4.5 <i>Summary of results for hypothesis four</i>	118
3.5 Summary of Results	119
CHAPTER FOUR: DISCUSSION	121
4.1 Overview of the Chapter	121
4.2 Summary of the Research Aims and Overview of the Study	121

4.3 Summary of Findings and their Relation to Existing Literature	122
4.3.1 Hypothesis one: Attributions	123
4.3.1.1 <i>Dangerousness</i>	124
4.3.1.2 <i>Controllability</i>	127
4.3.2 Hypothesis two: Emotional reactions	130
4.3.2.1 <i>Anger</i>	130
4.3.2.2 <i>Pity</i>	132
4.3.2.3 <i>Fear</i>	133
4.3.3. Hypothesis three: Intended behaviour	135
4.3.3.1 <i>Helping behaviour</i>	135
4.3.3.2 <i>Coercion</i>	137
4.3.3.3 <i>Social distance</i>	137
4.3.4 Hypothesis four: Relationships between attributions, emotions and intended behaviours	138
4.4 Strengths and Limitations of the Research	141
4.4.1 Measures	141
4.4.1.1 <i>Attribution measures.</i>	142
4.4.1.1.1 <i>Dangerousness</i>	142
4.4.1.1.2 <i>Controllability</i>	143
4.4.1.2 <i>Emotional response measures</i>	144
4.4.1.3 <i>Measures of intended behaviour</i>	144
4.4.1.3.1 <i>Social distance</i>	144
4.4.1.3.2 <i>Help and coercion</i>	146
4.4.1.4 <i>Overarching strengths and limitations of measures chosen</i>	147

4.4.1.4.1 <i>Use of semantic differential scales</i>	147
4.4.1.4.2 <i>Use of self-report</i>	148
4.4.2 Design and Methodology	148
4.4.2.1 <i>Design</i>	148
4.4.2.2 <i>Use of video</i>	150
4.4.2.3 <i>Diagnostic labels</i>	151
4.4.2.4 <i>Sample</i>	152
4.4.3 Analysis	153
4.5 Theoretical Implications	155
4.5.1 Attribution theories	155
4.5.2 Theoretical perspectives not explored	156
4.5.2 Signalling events	158
4.5.3 Aspects of attribution theory that were not explored	159
4.5.4 Theoretical conclusion	160
4.6 Clinical Implications	160
4.6.1 Overall attitudes	160
4.6.2 The role of emotions	162
4.7 Future Research	163
4.7.1 Theoretical	163
4.7.2 Methodological	164
4.8 Conclusion	165
REFERENCES	168
WORD COUNT = 40,000	

LIST OF APPENDICES

- Appendix A Study Information & Consent Sheet
- Appendix B Letters of Ethical Approval and Approval of Amendments
- Appendix C Video Scripts
- Appendix D Adapted Version of Section One of The Knowledge Questionnaire
- Appendix E Adapted Attribution Questionnaire-27
- Appendix F Perceived Dangerousness Scale
- Appendix G Adapted Social Distance Scale
- Appendix H A Sample of Normal Histograms and Wald Statistics
- Appendix I A Sample of Histograms for the 'Help', 'Anger' and 'Fear' variables.

LIST OF TABLES

- Table 1 Search terms and Boolean Connectors for Searching Online Databases
- Table 2 Studies Investigating Staff attitudes Towards the Label ‘Personality Disorder’
- Table 3 Gender of Participants Within Each Group
- Table 4 Age Range of Participants Within Each Group
- Table 5 Number of Items and Cronbach’s Alpha Value for Each Scale.
- Table 6 Means and Standard Deviations of Participants’ Total Scores on the Perceived Dangerousness Scale for the Personality Disorder and Schizophrenia Group for Both the Prosocial and Antisocial Behavioural Conditions
- Table 7 Means and Standard Deviations of Participant’s Scores on the ‘Controllability’ Factor of the Adapted AQ-27 for the Personality Disorder and Schizophrenia Group for Both the Prosocial and Antisocial Behavioural Conditions
- Table 8 Number and Percentage of the Total Sample of Participants with Low and High Scores on the ‘Anger’ factor of the Adapted AQ-27 when Viewing Prosocial Behaviour
- Table 9 Number and Percentage of the Total Sample of Participants with Low and High Scores on the ‘Anger’ factor of the Adapted AQ-27 when Viewing Antisocial Behaviour
- Table 10 Means and Standard Deviations of Participant’s Total Scores on the ‘Pity’ Factor of the Adapted AQ-27 for the Personality Disorder and Schizophrenia Groups for both the Prosocial and Antisocial Conditions

- Table 11 Number and Percentage of the Total Sample of Participants with Low and High Scores on the 'Fear' factor of the Adapted AQ-27 when Viewing Prosocial Behaviour
- Table 12 Number and Percentage of the Total Sample of Participants with Low and High Scores on the 'Fear' factor of the Adapted AQ-27 when Viewing Antisocial Behaviour
- Table 13 Number and Percentage of the Total Sample of Participants with Low and High Scores on the 'Help' Factor of the Adapted AQ-27 after Viewing Prosocial Behaviour
- Table 14 Number and Percentage of the Total Sample of Participants with Low and High Scores on the 'Help' Factor of the Adapted AQ-27 after Viewing Antisocial Behaviour
- Table 15 Means and Standard Deviations of Participant's Scores on the 'Coercion' Factor of the Adapted AQ-27 for the Personality Disorder and Schizophrenia Groups for both the Prosocial and Antisocial Conditions
- Table 16 Means and Standard Deviations of Participant's Total Scores on the Social Distance Scale for the Personality Disorder and Schizophrenia Groups for both the Prosocial and Antisocial Conditions
- Table 17 Spearman's Rho Correlation Coefficients Between Participants' Attribution, Emotional Reaction and Intended Behaviour Scores in the Schizophrenia Prosocial Group
- Table 18 Spearman's Rho Correlation Coefficients Between Participants' Attribution,

Emotional Reaction and Intended Behaviour Scores in the Personality Disorder
Prosocial Group

Table 19 Spearman's Rho Correlation Coefficients Between Participants' Attribution,
Emotional Reaction and Intended Behaviour Scores in the Schizophrenia
Antisocial Group

Table 20 Spearman's Rho Correlation Coefficients Between Participants' Attribution,
Emotional Reaction and Intended Behaviour Scores in the Personality Disorder
Antisocial Group

LIST OF FIGURES

- Figure 1 The Social Cognitive Model of Stigma (Corrigan, 2000)
- Figure 2 Weiner's Causal Attribution Theory (1995)
- Figure 3 Corrigan et al's (2003) Model of Public Discrimination Towards a
Person With a Mental Illness.
- Figure 4 Number of Mental Health Placements Undertaken By Participants
- Figure 5 Number of Participants By Type of Current Clinical Placement
Specialty
- Figure 6 Number of Participants by Previous Clinical Experience and Setting

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ABSTRACT

Objectives

The aim was to investigate whether there are differences in the attributions, emotional reactions and intended behaviours of student mental health nurses towards individuals with personality disorder, compared to those with schizophrenia. The relationships between attributions, emotional reactions and intended behaviours were also investigated.

Method

An experimental mixed design was used. Participants were randomly allocated into two groups: one viewing the label of personality disorder (N= 46), and the other viewing the label of schizophrenia (N = 41). Participants were shown two videos of a male: one of prosocial behaviour, the other of antisocial behaviour. After each video they completed three questionnaires measuring attributions, emotional reactions and intended behaviours. A correlational design was used to assess associations between attributions, emotional reactions and intended behaviours.

Results

No significant differences were found between the groups on the attributions of controllability or dangerousness, the emotional reactions of pity, anger or fear, or the intended behaviours of help and coercion. A significant difference was found between the groups on the social distancing measure, with participants in the schizophrenia group desiring greater social distance. This is contrary to the direction predicted. No significant associations were found consistently across the groups between controllability and the intended behaviours. Dangerousness was significantly

associated with the desire to socially distance oneself across all groups. Pity was the only emotion that did not significantly correlate with any of the intended behaviours. Significant negative correlations were found between fear and anger and intended helping behaviours.

Conclusion

Overall, there was no significant difference between student mental health nurses' attributions, emotional reactions and intended behaviours towards individuals labelled with personality disorder and individuals labelled with schizophrenia. It is acknowledged that the significant finding relating to social distancing may be due to limitations of the analysis. Results suggest that the attribution of dangerousness and emotional reactions of anger and fear are important when considering the reactions of student mental health nurses towards their patients.

CHAPTER ONE: INTRODUCTION

1.1 Overview

1.1.1 Rationale and aims of the study.

Widespread clinical consensus, in addition to a wealth of theoretical literature, suggests that individuals with a diagnosis of personality disorder typically evoke negative responses in mental health staff. These responses include conceptualising clients with a diagnosis of personality disorder as ‘difficult’ (Hinshelwood, 1999) and a belief that this client group is more problematic to manage and treat than those with other psychiatric diagnoses (Cleary, Siegfried & Walter, 2002). This study aims to explore whether student mental health nurses hold different attributions, have different emotional reactions and anticipate different intended behaviours towards clients with a diagnostic label of ‘personality disorder’ compared with clients labelled as having ‘schizophrenia’.

Much previous research into the attitudes and stigmas held by mental health staff has been based on attribution theories. Early attribution theories, such as those of Heider (1958) and Weiner (1980), suggest that a signalling event leads individuals to make attributions about another’s situation or behaviour, and it is these attributions that initiate emotional reactions and behavioural responses. Consequently, the majority of previous studies investigating the attitudes of mental health staff have focussed on the behaviour of others as the signalling event, such as challenging behaviour (Lucas, Collins & Langdon, 2009) or deliberate self-harm (Crawford, Geraghty, Street & Simonoff, 2003). However, as research in the areas of attributions and stigma has progressed, it has been suggested that there may be a wider variety of factors that could be deemed as signalling events, than originally suggested by Weiner

(1980). Corrigan's social cognitive model (2000) suggests that the range of signalling events that influence the attributions and stigmas towards individuals with mental health problems are likely to include factors such as symptoms, behaviours and diagnostic labels.

In comparison to behaviours, research utilising alternative potential signalling events, such as diagnostic labels, appears to be under-represented in the literature. This study will therefore aim to use both diagnostic labels and behaviour as signalling events to investigate the association between attributions, emotional responses and intended behaviours of mental health nursing students. It will aim to do this through the novel use of video, as opposed to written, vignettes or personal clinical experiences where ecological validity is more limited and potentially different constructs are explored (Lucas et al., 2009). It is important to explore the reactions to diagnostic labels as, frequently a client's diagnosis is one of the first pieces of information received by professionals, often before any form of contact has taken place. In light of this, it could potentially be incredibly damaging if mental health professionals react negatively towards service users prior to meeting them, or at their first meeting of them, on the basis of their diagnostic label, not least because research has indicated that negative attributions and emotional reactions can result in discriminatory behaviour, including social distancing and coercion (Corrigan & Watson, 2002).

The aim of this study will therefore be to explore whether there are differences in the attributions, emotional reactions and intended behaviours of student mental health nurses towards individuals with a diagnostic label of personality disorder compared to those with a diagnostic label of schizophrenia. It will also consider

whether their attributions and emotions are associated with their intended behaviour towards these client groups.

1.1.2 Overview of the chapter.

This chapter will begin by discussing the history and prevalence of personality disorder. This will be followed by a discussion of current criteria and methods for assessment and diagnosis and some of the issues raised by this. The place of personality disorder within the current mental health system will then be described along with the current attitudes of mental health professionals and services towards this client group and the potential impact of these attitudes. Theories of stigma will then be considered with the aim of providing a theoretical framework for exploring staff attitudes and attributions. A review of the available literature pertaining to the attributions, attitudes and stigma held by mental health professionals towards clients with personality disorder will then be conducted. Finally, a rationale for the present study will be given and hypotheses for the research will be stated.

1.2 Personality Disorder

1.2.1 History of personality disorder.

Personality disorder is a diagnosable mental health condition which often results in significant levels of distress, not only for those who have the condition but also those who are involved with them in a personal or a professional capacity (Murphy & McVey, 2010). The concept of personality disorder has been discussed for centuries, with our understanding of it evolving over time on the basis of available knowledge and social attitudes. While descriptions of personality functioning are reported to date back to Hippocrates in the 4th Century, it is suggested that Pinel's 18th

Century observation of patients who ‘behaved in irrational ways even though they seemed to be in touch with reality and were aware of the irrationality of their actions’ was one of the first explicit attempts at describing what would now be characterised as personality disorder (Hoermann, Zupanick, & Dombeck, 2011, para. 3).

By the early 1900s, European diagnostic systems were beginning to describe different personality types, although it was not until the contributions of Freud in the 1920s that the aetiology of these personality types began to be considered, resulting in the psychoanalytic concept of ‘character disorders’ (Kohut & Wolf, 1978). However, at this time, ‘character disorders’ were not considered as a legitimate mental illness, rather they were typically understood as weaknesses of character or wilfully defiant behaviour caused by difficulties during an individual’s childhood (Kohut & Wolf, 1978).

It was not until the 1950s and the publication of the first Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 1952) that personality disorder became formally recognised as a legitimate diagnostic label, although at this time it continued to be heavily influenced by psychoanalytic theory. Throughout subsequent publications of the DSM, the definition, diagnostic categories and criteria for personality disorder have changed significantly, representing the expansion of and advancements in the fields of psychology and psychiatry, leading to a growing knowledge base and the need for specific evaluative criteria in order for the diagnosis to easily lend itself to research.

Some argue that, by the mid-1990s, the mental health field had moved away from the psychoanalytic understanding of ‘character disorders’, whereby persons with personality disorders were seen as people with untreatable moral weakness, or

wilfully bad behaviour. Rather, it was argued that clinicians and services have shifted to recognise personality disorders as distressing, real and legitimate conditions, that have a significant negative impact on people's lives and, in many cases, can be successfully treated (Hoermann, et al., 2011). However, recent research into attitudes towards people with personality disorder may serve to question this idea (James & Cowman, 2007; Keenan, 2010; Markham, 2003; Strong, 2010).

1.2.2 Definition of personality disorder

Today, the diagnostic label of personality disorder appears in the two most widely used diagnostic manuals: The International Classification of Mental and Behavioural Disorders (ICD-10; World Health Organisation (WHO), 2008) and the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association (APA), 2013). ICD-10 defines a personality disorder as “a severe disturbance in the characterological constitution and behavioural tendencies of the individual, usually involving several areas of the personality, and nearly always associated with considerable personal and social disruption” (WHO, 2008, p. 157).

DSM-5 defines a personality disorder as:

an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment' (APA, 2013, p. 645).

DSM-5 currently contains both the older approach to diagnosis of personality disorders as found in DSM-IV-TR (APA, 2000) and a new hybrid-dimensional model,

developed specifically for DSM-5. The reasons for this will be discussed in depth later. Based on the diagnostic criteria appearing in both DSM-IV-TR and DSM-5, it is specified that a person must demonstrate significant and enduring difficulties in at least two of the following four areas: (a) cognition, (b) affect, (c) interpersonal functioning, or (d) impulse control. Importantly, the diagnostic criteria specify that this pattern must not be better accounted for as a manifestation or consequence of another mental disorder and/or as a result of the physiological effects of substance use or a general medical condition.

In addition to the overarching criteria for diagnosing personality disorder, as described above, both ICD-10 and DSM-IV-TR (APA, 2000)/DSM-5 (APA, 2013) adopt a categorical approach to personality pathology. ICD-10 suggests that there are nine specific categories of personality disorder and DSM-IV-TR/DSM-5 specifies ten categories. Each of these personality disorder subtypes is defined by a unique set of diagnostic criteria, reflecting the observable characteristics associated with that specific disorder. The DSM classification also groups these ten specific disorders into three broad clusters, each representing a group of specific personality disorders that may be considered similar in terms of cognitive, emotional and behavioural patterns. Cluster A includes paranoid, schizoid and schizotypal personality disorders and is characterised by odd and eccentric behaviours. Cluster B consists of histrionic, narcissistic, antisocial and borderline personality disorders and is characterised by dramatic, emotional or erratic presentations. Finally, Cluster C encompasses anxious or fearful characteristics and includes obsessive compulsive, avoidant and dependent personality disorders. It is often the case that individuals may meet the diagnostic criteria for more than one personality disorder, with evidence indicating that co-occurrence of disorders from the same cluster is likely (Skodol, 2005).

Until the very recent release of DSM-5 (APA, 2013), personality disorders were coded on a separate axis to mental illness; with mental illness being on Axis I, and personality disorder on Axis II. This was because Axis I disorders are considered to result from mainly biological causes that have an unstable, changeable course, whereas Axis II disorders were characterised by longstanding traits resulting from mainly psychological causes that have an unchangeable course (Ruocco, 2005). Studies indicated that those individuals with a diagnosis of personality disorder are also more likely to develop a co-morbid Axis I difficulty (Moran, 2002). It may be suggested that, because until very recently personality disorders were placed on Axis II alongside conditions that cannot be ‘cured’, such as learning disabilities and developmental disorders, this may have contributed to the widely held belief that personality disorder is difficult to treat or untreatable because of the stable and enduring nature of other disorders on this Axis. If this is true, it may be reasonable to anticipate that the nonaxial approach used by DSM-5 may, over time, assist in reducing the belief that personality disorders are untreatable.

At present, DSM-5 (APA, 2013) is utilising both the categorical approach to diagnostic criteria for personality disorder, as described above, that appeared in DSM-IV-TR (APA, 2000) and also an alternative dimensional DSM-5 model for personality disorders. This is with a view to maintaining clinical continuity with the use of the old system, while also introducing a new approach “which aims to address the numerous shortcomings of the current approach to personality disorders” (APA, 2013, p. 761).

The alternative dimensional approach to diagnosis as contained in DSM-5 (APA, 2013) is characterised by considerations of impairments in personality functioning and also pathological personality traits. This alternative DSM-5 approach therefore defines the essential features of a personality disorder as:

(a) moderate or greater impairment in personality (self/interpersonal) functioning; (b) one or more pathological personality traits; (c) the impairments in personality functioning and the individual's personality trait expression are relatively inflexible and pervasive across a broad range of personal and social situations; (d) the impairments in personality functioning and the individual's personality trait expression are relatively stable across time, with onsets that can be traced back to at least adolescence or early adulthood; (e) the impairments in personality functioning and the individuals personality trait expression are not better explained by another mental disorder; (f) the impairments in personality functioning and the individual's personality trait expression are not solely attributable to the physiological effects of a substance or another medical condition (e.g. severe head trauma; (g) the impairments in personality functioning and the individuals personality trait expression are not better understood as normal for an individual's developmental stage or sociocultural environment' (APA, 2013. p. 761).

DSM-5 (APA, 2013) includes diagnostic criteria for antisocial, avoidant, borderline, narcissistic, obsessive-compulsive, and schizotypal personality disorders, allowing for other prominent trait elevations to be noted as specifiers. The DSM-5 also utilises a diagnosis of Personality Disorder – Trait Specified. This can be used for individuals who have a sub threshold presentation for any of the six named personality disorders, or those who have a mixed or atypical presentation. This diagnosis allows for the specific level of impairment in personality functioning and the pathological personality traits that characterise the individual's personality to be considered, with a view to utilising this to develop coherent treatment plans. A diagnosis of personality disorder requires two determinations: 1) an assessment of the

level of impairment in personality functioning, which is needed for criterion A, and 2) an evaluation for pathological personality traits, which is required for criterion B.

Given that, at the time of writing, DSM-5 (APA, 2013) had only been released for six months, there is very little evidence for the utility of this dimensional approach in the clinical field as yet. In light of this, and given that DSM-5 continues to incorporate it, the majority of work referenced in this study will be in relation to the DSM-IV-TR (APA, 2000) criteria, unless otherwise specified.

1.2.3 Prevalence rates of personality disorder.

1.2.3.1 Community populations.

One of the largest and most recent surveys of the prevalence rates of personality disorder in the general population in Great Britain was conducted by Coid, Yang, Tyrer, Roberts and Ullrich (2006). This study found that 4.4% of a representative community sample met the criteria for any personality disorder, with men more likely to meet diagnostic criteria than women (5.4% and 3.4% respectively). This is towards the lower end of prevalence rates found in earlier studies which ranged from 3.9% (Lezenweger, Loranger, Korfine & Neff, 1997) to 14.8% (Klein et al., 1995). The findings by Coid et al. are, however, similar to those reported by the WHO World Mental Health Surveys, which produced an overall estimated prevalence rate for personality disorder of 6.1%, with a prevalence rate of 2.4% in Western Europe and 7.6% in the United States (Huang et al., 2009).

Coid et al (2006) also explored the prevalence rates of each of the DSM-IV (APA, 1994) personality disorders at a single point in time. These findings indicated that the obsessive-compulsive diagnosis was the most prevalent type of personality disorder (1.9%), while the least prevalent were the dependent and schizotypal

disorders (0.06%). Classification of personality disorder by cluster found Cluster C to be most frequent (2.6%), with Cluster A (1.6%) and Cluster B (1.2%) being less prevalent. Of those who met the criteria for a specific personality disorder diagnosis, 53.5% only had one disorder, 21.6% had two, and 11.4% met the criteria for three and 14.0% fulfilling criteria for between four and eight diagnoses.

1.2.3.2 Clinical and forensic populations.

In 2006, the British Psychological Society published their *Understanding Personality Disorder* report, compiling research evidence of prevalence rates of personality disorder in various clinical populations (Alwin, Blackburn, Davidson, Hilton, Logan & Shine, 2006). The report indicates that, in primary care, between 5% and 8% of patients have a personality disorder as their main clinical diagnosis (Moran, Leese, Lee, Walters & Thornicroft, 2003). However, these estimates rise to between 20% and 30% when all clinical diagnoses are considered as opposed to only the primary diagnosis.

When the focus is changed to consider the prevalence of personality disorder specifically in psychiatric patients, evidence suggests that this estimate rises to between 30% and 40% of outpatients and between 40% and 50% of inpatients. Findings from the Hospital Episode Statistics (Department of Health, 2009) showed that approximately 75% of all patients admitted to hospital with a personality disorder in the UK are for borderline personality disorder, with the next two most common diagnoses being personality disorder not otherwise specified (6%) and antisocial personality disorder (4%). This presents a very different picture to the community findings published by Coid et al. (2006). Finally, this estimate rises once again when considering a forensic population, with evidence indicating that between 50% and 80% of adult prisoners meet criteria for at least one personality disorder (Personality

Disorder Services Framework; Eastern Specialised Mental Health Commissioning Group, 2005).

These figures demonstrate the significant effects of personality disorder for both the individual and the services involved in supporting and treating them. Given these statistics, it is therefore almost inevitable that all clinicians, regardless of discipline, who are involved with mental health or forensic services, will encounter individuals with a diagnosable personality disorder. In light of this, it is therefore important to be aware of attitudes held by both current and future mental health professionals towards this client group.

1.2.4 Limitations of the diagnostic criteria.

Given the widespread prevalence of personality disorder, the need for diagnostic criteria that are not only reliable and valid, but also that are clinically useful, is paramount. Despite this, the classification and diagnosis of personality disorder remain areas of intense academic debate, namely with regards to whether or not this condition is treatable (Murphy & McVey, 2010). As previously discussed, the current DSM-5 (APA, 2013) publication includes both the longstanding categorical model of diagnostic criteria for personality disorder which appeared in previous versions of the DSM, and a new dimensional trait model. Given that the new dimensional model is very new to the field and, as yet, is unlikely to be used by many clinicians due to the need for continuity, the limitations of the categorical approach, as detailed in DSM-IV-TR (APA, 2000), will be discussed. This will also be more relevant to the literature considered in the present study as the vast majority of published material was conducted prior to the release of DSM-5 and is based on the categorical approach to personality disorder diagnosis. Consideration will then be

given to the ways in which the new DSM-5 dimensional approach may overcome some of these limitations.

Despite categorical diagnostic systems having been used by mental health professionals for many years, there have been many criticisms of the DSM and ICD diagnostic criteria for personality disorder, with critics suggesting that the categorical approach lacks both empirical and clinical evidence for its utility, thus rendering it unsuitable for task (Kupfer, First & Reiger, 2002). Criticisms of the categorical approach to personality disorder diagnosis, particularly with respect to the reliability and validity of the diagnostic criteria (NICE, 2009b), appeared almost immediately following the publication of DSM-III (APA, 1980), with these issues remaining largely unaddressed in the revision process for DSM-IV (APA, 1994), the DSM-IV-TR (2000) and the categorical approach detailed in section two of the DSM-5 (APA, 2013).

Diagnostic criteria that appear to lack utility in clinical practice are likely to leave professionals feeling confused and struggling to engage with and treat these individuals effectively. The main criticisms of the categorical diagnostic system are outlined below:

1. Communicative function of diagnostic categories:

The application of DSM-IV-TR (APA, 2000) criteria (also contained in DSM-5) for each personality disorder subtype results in significant heterogeneity between individuals with the same diagnosis. It is therefore possible for individuals to meet the criteria for the same personality disorder subtype despite having no features in common. For example, research suggests that there are 256 unique ways in which the current criteria for borderline personality disorder can currently be met (Johansen,

Katerud, Penderson, Gude & Falkum, 2004). In light of this, it may be suggested that the diagnostic label is limited in its ability to provide suggestions for the type, course and outcome of treatment. This is likely to have significant implications for the perception of 'treatability' of personality disorder, as the diagnosis itself does not necessarily suggest what may be an appropriate course of action and limits how far treatment-interfering behaviours can be predicted.

In addition to this, it is suggested that the majority of research into personality disorder is focussed on specific subtypes, with research into borderline personality disorder often being at the forefront, as individuals with this diagnosis are more likely to display help-seeking behaviours than other subtypes (Dingfelder, 2004). However, the heterogeneity of subtypes may call into question the validity of such research findings, with generalisability to the population as a whole being limited.

Furthermore, the current criteria do not address the issue of severity of the disorder. This, therefore, may lead clinicians to base initial judgements on the most severe cases, thus potentially leading to more negative attitudes about clients where the severity of their disorder is minimal.

2. Limited coverage of personality pathology:

Research has suggested that the structural validity of the specific DSM categorical subtypes of personality disorder is poor, with many studies being unable to replicate the diagnostic subtypes (Verheul & Widiger, 2005). This tends to lead to difficulties such as clients being diagnosed with personality disorder not otherwise specified (PD-NOS), with diagnostic concepts showing little resemblance to typical clinical presentations (Verheul & Widiger, 2005). PD-NOS is the most frequently diagnosed personality disorder in clinical settings, with up to 40% of cases not falling into one or more specific personality disorder diagnostic categories (Westen &

Arkowitz-Westen, 1998). This, once again, is likely to have significant implications for clinicians' perceptions of treatability of this client group, as little information is gleaned from the diagnostic label about where the need for intervention lies or the nature of the personality dysfunction.

3. Reliability and validity of categories:

Research has suggested that, utilising the categorical DSM criteria, means there is much diagnostic instability, with significant diagnostic change often being seen over a period as short as six months (Shea et al., 2002). This is inconsistent with the stability of personality traits that is required to meet the criteria for personality disorder diagnosis. This also has implications for the utility of the reported prevalence rates of personality disorder, with many prevalence studies, such as that by Coid et al. (2006), only considering the prevalence of diagnoses at a single point in time. Furthermore, difficulties in operationalising the personality disorder criteria have resulted in unacceptably low convergent validity across different assessment measures for personality disorder (APA, 2012). Once again, this lack of diagnostic reliability and validity is likely to have implications for determining appropriate treatment options, thus resulting in clinicians being likely to find this client group difficult to manage, potentially contributing to the perception that this client group are difficult and unrewarding to care for.

The alternative trait model proposed in DSM-5 (APA, 2013) may go some way to addressing these difficulties. The trait model is reportedly based on extensive research literature to demonstrate a robust personality trait hierarchical structure with a high degree of convergent and discriminant validity across a wide range of structured interviews and questionnaires. It aims to identify prominent trait elevation, thus identifying primary targets for treatment intervention (APA, 2012). It also

includes an assessment of severity separate from that of the assessment of trait elevation in order to categorise clients' difficulties accordingly.

It is hypothesised that these changes, in particular the use of trait profiles and severity ratings, will increase clarity surrounding diagnosis of this client group and, consequently, reduce disagreement amongst staff and alter the perception that personality disorders are untreatable. This is likely to assist clinicians greatly in working with this client group as it will not only help to individualise treatment plans, but provide a more robust evidence base to develop specialised services and training for clinicians and future clinicians.

1.3 Personality Disorder in the Mental Health Service

1.3.1 Service provision.

Given the difficulties with diagnosis as described above, it is perhaps unsurprising that the provision of services for clients with a personality disorder has always been notoriously inadequate, with this client group frequently becoming 'revolving door' patients, attempting to gain help from an array of services that are often unable or unwilling to provide it (National Institute for Mental Health in England (NIMHE), 2003). Previously, many service providers had relied on the exclusion from treatment clause of the Mental Health Act (MHA) 1983 in order to legitimise the fact that appropriate services were not being offered to this group of people (Evans & Watson, 2010). Even inquiries into serious incidents, such as the murder of Lin and Megan Stone in 1996 by a man known to mental health services with a diagnosis of antisocial personality disorder, concluded that, at times, services are unable to offer any input to these clients that may be helpful (NHS South East Coast, 2006).

However, ultimately, as a result of significant public concern regarding several high-profile cases where individuals with personality disorder had been considered untreatable but posed a high level of risk, the Labour government invested considerable resources in an attempt to ensure that appropriate and adequate mental health services are accessible to those with personality disorder (Murphy & McVey, 2010). This initiative has led to many changes in the way in which personality disorder is categorised and treated across all levels of service, including changes in the MHA 2007, which included changes to the requirements regarding detention and treatability, alternatives to detention and appropriate treatments were considered. It has also resulted in increased research into the area of personality disorder, assisting the development of new therapeutic models and strengthening the evidence base for the efficacy of existing treatment strategies, such as Dialectical Behavioural Therapy (Linehan, 1993), Mentalization-based treatment (Bateman & Fonagy, 2004) and Schema Focused Therapy (Young, 1999).

The development of these strategies also appears to have led to a greater understanding of personality disorder and of the associated difficulties and distress that people with this diagnosis experience. This is evidenced in the development of new policies for service provision, such as 'Recognising complexity: Commissioning guidance for personality disorder services' (Department of Health, 2009) and updates in guidance for clinicians in working with this client group (NICE, 2009a; 2009b).

1.3.2 Current attitudes of healthcare professionals towards clients with personality disorder.

Given the paradigm shift described above, it would indicate that some of the historical views of personality disorder have begun to be challenged at a

governmental or national level. However, both empirical and anecdotal evidence continues to suggest that, despite an improving knowledge base, a wider range of effective treatment strategies, and more positive legislation with regards to the treatability of personality disorder, there has been little shift in the view of this diagnosis at a service or clinician level.

In a recent literature review considering the attitudes of mental health professionals about mental illness (Wahl & Aroesty-Cohen, 2010), many studies were cited to suggest that clinicians continue to hold negative attitudes towards clients with personality disorder (in particular the borderline subtype). These findings included psychiatric nurses perceiving personality disordered clients as nuisances, reporting that they felt angry towards this client group (Deans and Meocivic, 2006) and that individuals with this diagnostic label are undesirable to be with (Servais & Saunders, 2007). These findings continue to echo those from studies conducted over 20 years ago, such as Lewis and Appleby's study (1988), where personality disordered clients were perceived as manipulative, attention seeking and annoying. They continue to be replicated today with this client group still being perceived more negatively than those with diagnostic labels typically associated with mental illness, such as schizophrenia or depression (James & Cowman, 2007; Purves & Sands, 2009; Strong, 2010). Such findings strongly indicate that, despite various governmental initiatives, there continues to be an element of stigma associated with the diagnostic label of personality disorder.

1.3.3 Attitudes of healthcare professionals towards clients with other psychiatric diagnoses.

In order to investigate the beliefs and attitudes of mental health professionals towards clients with personality disorder, many studies have compared and contrasted these with the beliefs and attitudes toward people with other psychiatric diagnoses. The two most widely used diagnoses for comparison are schizophrenia/psychosis and depression, and this is likely to be in part due to the fact that these disorders also have high worldwide prevalence rates across inpatient, community and forensic settings (Koekkoek, Van Meijel and Hutschemaekers (2006). This literature review by Koekkoek et al(2006) indicates that the use of these diagnoses as control conditions may be because these labels also often result in patients being labelled as ‘difficult’, namely those with schizophrenia being considered as ‘care avoidant’ and those with chronic depression being labelled as ‘ambivalent’ towards care. However, despite these other client groups also being perceived as ‘difficult’, literature suggests that they are not disliked and discriminated against to the same extent as those individuals with a diagnosis of personality disorder (Markham, 2003; Richman, Mercer, and Mason, 1999).

Previous studies have offered an explanation for this, suggesting that clients labelled with personality disorder are considered by clinicians to be more in control of their difficulties and associated behaviour than those with other mental health diagnoses such as schizophrenia (Keenan, 2010) or depression (Strong, 2010). This can then affect staff perceptions of the client within the ‘sick role’, leading to clients being separated into categories of ‘mad’ or ‘bad’ on the basis of their diagnosis, with those who are perceived to possess greater levels of control, i.e. those with a diagnosis of personality disorder more likely to be in the ‘bad’ category (Koekkoek et al.,

2006). This distinction is likely to result in significant implications in relation to the intended helping behaviour of staff, and is also likely to impact on the clients' perception of themselves, potentially perpetuating maladaptive interpersonal interactions.

In contrast to the previously discussed negative attitudes of mental health staff across all disciplines towards people with personality disorder, as reported in Whal & Aroesty-Cohen's literature review (2010), this same review cited many studies indicating positive attitudes to clients with schizophrenia and depression. These studies demonstrated that a) mental health professionals were optimistic about recovery and the treatability of the illness (Grausgruber, Meise, Katschnig, Schony & Fleishhacker, 2007; Magliano, Fiorillo, De Rosa, Malangone & Maj, 2004; Markham, 2003); b) supported clients being placed in the community with a reduced desire for social distance (Des Courtis, Lauber, Costa & Cattapan-Ludewig, 2008); c) viewed them as less dangerous (Markham, 2003; Bjorkman, Angelman & Jonsson, 2008); and d) generally held more positive overall attitudes towards these client groups (Tay, Pariyasami, Ravindran, Ali & Rowsudeen, 2004). Despite these results, it should be noted that, while there is clearly more evidence for positive attitudes towards people with other mental health diagnoses (such as schizophrenia or depression) than there is for those with personality disorder, these results are not always consistent, and negative attitudes do continue to exist with regards to these client groups (Whal & Aroesty-Cohen, 2010).

1.3.4 Challenges to healthcare professionals working with individuals with personality disorder.

A review of the literature by Koekkoek et al. (2006) suggests that there are four major theoretical factors that influence clinicians' perceptions of a client as being 'difficult': (1) chronicity of their disorder, (2) dependency on care, (3) character pathology and (4) lack of reflective capabilities. By the very nature of personality disorder, this client group are likely to fulfil all of these criteria for being labelled as 'difficult'. Research has demonstrated that clinicians refer to personality disorder (particularly borderline type) up to four times more frequently than any other diagnosis when asked about the characteristics of difficult patients (Bongar, Markey & Peterson, 1991).

It is important to acknowledge that service users with personality disorder can be more challenging to work with by the very nature of their presentation than clients with other diagnoses, and thus perhaps validate the difficulties that clinicians may have when working with this client group. For example, therapeutic movement is often slow with imperceptible progress (Pfohl et al., 1999, as cited in Murphy & McVey, 2010) or apparent progress followed by deterioration (Gallop, 1985), which can make meeting service targets difficult and can be costly to services when longer term intervention is required. It can also be the case that this client group appear particularly rejecting towards clinicians (Kelly & May, 1982) and show little, if any, gratitude (Pfohl et al., 1999). It is also suggested that the vast majority of mental health clinicians are ill-equipped to work with this client group, in part as a result of issues involved in professional training such as the dominance of the medical model and placements not being long enough to provide staff with experiences of building trusting relationships with this client group (Murphy & McVey, 2010).

In spite of these difficulties, there can be many positive and rewarding aspects of working with this client group. However, whilst the various government papers described previously may suggest attempts to provide knowledge and instil hope that personality disorder is treatable from a theoretical perspective, there is no research that highlights the potential positive features of this work from a clinician's point of view. This lack of research would appear to reflect the general opinion of clinicians and services, once again raising concern that there is stigma attached to the diagnostic label of personality disorder, which may be maintained by a lack of positive information.

1.3.5 Stigma associated with the personality disorder label.

Stigma can be defined as 'a mark of disgrace associated with a particular circumstance, quality or person' (Oxford Dictionaries, 2010). Individuals possessing such an attribute are seen to be different from the majority in ways that are perceived to be undesirable or shameful (Garant, Lingler, Conner & Dew, 2009). Stigmatisation occurs when a majority of group members observes these attributes and this leads to labelling, stereotyping, separation, status loss, and discrimination (Link & Phelan, 2001). Consequently, a diagnostic label with any level of stigma attached to it is likely to be incredibly damaging for service users. This may be especially so if it is mental health staff who hold this stigmatising viewpoint.

One of the most fundamental tools for improving outcomes for individuals with personality disorder is the response that they receive from health care professionals (Marziali, Munroe-Blum & McCleary, 1999). The Department of Health (2007) attempted to address the stigma attached to this diagnostic category by developing the *Knowledge and Understanding Framework*, with the aim of providing

practitioners with the support and knowledge to work with this client group more effectively. However, recent research indicates that this has had little effect in reducing the stigma of the personality disorder label, with staff continuing to feel and behave negatively towards these individuals (Servais & Saunders, 2007; Strong, 2010; Wahl & Aroesty-Cohen, 2010). Consequently, the Department of Health continues to acknowledge on their website that 'There is a great deal of stigma attached to the diagnosis of PD and this often translates to discrimination and exclusion' (Department of Health, 2012)

1.3.6 The impact of negative and stigmatising attitudes.

Although some service users with personality disorder go on to report positive experiences of mental health services (Fallon, 2003), many have reported that, despite valuing the input of services, they experienced mental health staff as rejecting, unhelpful, hostile and unsympathetic (Moran, 2002), feeling that they were treated worse by staff after receiving their diagnosis (Ramon, Castillo & Marrant, 2001). It has been suggested that, due to clinicians' difficulty in viewing clients with personality disorder without suspicion of their motives, the patient often loses their 'right' to be seen as a person, much less as a person with often extreme traumatic aetiology (Lovell, 2011). Many patients labelled with a diagnosis of personality disorder or as 'difficult' patients feel disempowered and helpless (Breeze & Repper, 1998) and are likely to be aware of the negative attitudes of clinicians, including the belief that they may be perceived as undeserving of care (Fallon, 2003). This can lead to feelings of shame (Seaneen, 2011) about their diagnostic label.

Given that a core feature of personality disorder is emotional lability and an inability to cope with strong emotions in helpful ways, these negative emotions are

likely to be detrimental to treatment as the individual's strategy for coping may be, for example, to over-compensate or project those emotions. They may also prevent the individual from developing the trust to fully disclose personal information, thus potentially limiting the efficacy of treatment and so perpetuating the negative attitudes held towards this client group.

In addition, findings from a number of studies supports the view that disturbed attachment relationships, often including an element of trauma, are fundamental to personality disorder (Kernberg, 1996). It is proposed that that attachment is crucial for the development of self thus, if attachment is disturbed, it can lead to disturbed self systems (Bateman & Fonagy, 2004). This may lead to rigid patterns of responding and impaired abilities including difficulties with meta-cognition, cognitive processing, affect regulation and relationship formation, resulting in difficult behaviour that may not comply with social norms. It is these very behaviours that clinicians and services appear to struggle with and that drive stigmatising processes, resulting in clients being marginalised or discharged from services (NIMHE, 2003). Equally, it is these behaviours that cannot be modified without the ability to form a secure attachment with treating clinicians. This then often results in clients with personality disorder appearing as 'revolving door' patients, who often only present when in crisis, thus reinforcing their bad reputation amongst mental health staff.

1.4 Theoretical Models of Attributions, Stigma and Associated Behaviours

So far, discussion of both empirical and anecdotal evidence has indicated that clinicians tend to feel more negatively towards clients with personality disorder than with other diagnoses, and that this can have significantly detrimental consequences in terms of care that is offered and the way in which it is delivered. Whilst it is important

to consider these aspects, there has been little research as to why or how these negative and stigmatising beliefs are formed or how they are maintained, although it is widely suggested that cognitive factors have a significant impact on the interpersonal reaction of staff towards this client group. The fact that staff attitudes remain negative towards clients with personality disorder, despite rapidly expanding knowledge about the disorder and an increasing evidence base of effective treatment strategies, suggests that stigma may be instrumental in maintaining the negative attitudes of mental health clinicians towards those with this diagnostic label. In light of this, it is essential to consider the way in which these negative attitudes are developed and maintained via cognitive processes. This section will consider some of the main cognitive concepts and models that attempt to offer an explanation for the relationship between stigmatising attitudes and discriminatory behaviour.

1.4.1 Early models of stigma and labelling.

As previously described, stigmatising attitudes suggest that certain individuals have attributes that others from a majority population consider deeply discrediting and indicate that the stigmatised person is 'tainted' in some way (Goffman, 1963, as cited by Strong 2010). Labelling theory (Link, Cullen, Struening, Shrout & Dohrenwend, 1989) attempted to provide an explanation as to how the concept of stigma may be applied to psychiatric labels. Link et al. suggested that psychiatric or diagnostic labels elicit a person's existing beliefs about mental illness and that these beliefs then affect that person's attitude towards those who are assigned those labels or diagnoses.

Whilst this model is effective in explaining how stigmatising attitudes may be formed on the basis of diagnoses or labels, it does not offer a clear theoretical understanding of how such processes impact on interpersonal responses towards the

stigmatised individual. Given the previous discussion of the significantly detrimental effects that the negative attitudes of clinicians can have when working with a personality disorder population, such as the withholding of treatment due to perceptions of ‘untreatability’, it is important to think about models that not only help to identify how stigmatising attitudes may be developed, but also what form the stigma might take and how this can impact on helping behaviours.

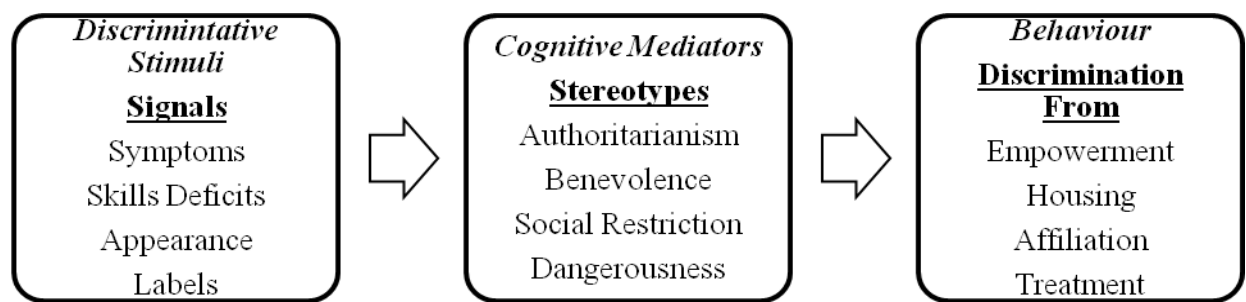
1.4.2 Generic social cognitive models of stigma.

In order to address the limitations of labelling theory, it may be beneficial to consider the utility of social cognitive models to the process of stigma in mental health. Social cognitive theories suggest that stigmas are the products of processing human knowledge structures (Corrigan, 1998). The social cognitive model of stigma seeks to explain the relationship between discriminative stimuli, such as psychiatric labels or diagnoses, and consequent behaviour, by identifying the cognitions that mediate these constructs. Whilst this model was originally developed to further understanding about the process of stigmatisation towards those with mental health difficulties within general society, it is also evident that mental health staff stigmatise certain groups of service users (Bjorkman et al., 2008). The generic form of this paradigm is illustrated in Figure 1.

This model suggests that the signals are given meaning by mediating knowledge structures, i.e. stereotypes, and that it is these knowledge structures, or stereotypes, that result in discriminatory behaviour. This generic model may have some utility for considering the process of stigmatisation within clinical practice, as it is able to provide a framework which assists in identifying the signals and stereotypes that lead staff to stigmatise particular groups of service users, as well as the

discriminatory behaviour that this may result in. However, whilst this model may be beneficial for thinking about the order of the various processes that may occur, there is little empirical evidence supporting the pathways in this model (Corrigan, 2000). Furthermore, it does not provide clear explanations of how and why particular signals lead to particular stereotypes and discrimination, which is vital when considering potential methods to reduce stigma towards individuals with personality disorder, for example in developing awareness and training programmes.

Figure 1. The Social Cognitive Model of Stigma (Corrigan, 2000)



1.4.3 Attribution theory.

Attribution theory attempts to provide further explanation for the relationship between stigmatising attitudes and discriminatory behaviour.

1.4.3.1 Heider (1958).

Attribution theory was first described by Heider (1958), who postulated that humans constantly attempt to make sense of themselves, others and the world, to fulfil an innate desire to understand themselves and their environment. In light of this, attribution theory views stigmas as knowledge structures which efficiently allow humans to categorise information about who or what is responsible for events, providing us with a sense of order and predictability and allowing us to respond accordingly.

In attribution theory's original form, Heider (1958) suggested that the development of attributions was a three-stage process, whereby the person observes the event, then determines the intention of the event, before finally making an attribution about the event. Heider (1958) asserted that these attributions could be either internal, external or a combination of the two. An internal attribution would mean that a person believes that the cause of behaviour is within a person, for example as a result of their innate personality. On the other hand, an external attribution would indicate that environmental factors or circumstances are the cause of the behaviour, such as luck or timing.

Whilst Heider's (1958) original ideas assisted in providing an explanation for the utility of attributions, it was relatively limited in its approach and facilitated little understanding with regard to how and why they might occur. Since this time, the evidence base for attribution theory has increased and, consequently, Heider's (1958) original ideas have been largely expanded.

1.4.3.2 Correspondent inference theory (Jones & Davis, 1966).

Jones & Davis (1966) expanded Heider's (1958) original theory of attribution, seeking to explain how an individual might perceive or infer the disposition and intention of others based on their actions. Jones and Davis hypothesised that correspondent inferences are made when individuals make judgements about an individual's personality characteristics or disposition on the basis of their behaviour alone. However, they also suggested that these correspondent inferences are more likely to be made when behaviour is perceived as intentional and negative. For example, a person who has committed an 'evil' act is more likely to be labelled as

‘evil’ than someone engaging in a helpful act is to be labelled as good (Sweeton & Deerrose, 2010).

Furthermore, Jones & Davis (1966) asserted that the decision about whether or not to make internal attributions about a person’s behaviour is based on an analysis of uncommon effects. This analysis involves individuals observing the consequences of the behaviour that occurred in conjunction with consideration of the potential consequences that could have arisen, if that person had behaved differently. If the consequences of the actual action or behaviour are similar to the potential consequences of other actions or behaviours, then an internal attribution is more likely to be made about the behaviour.

1.4.3.3 Kelley (1973).

Whilst Jones and Davis (1966) provided an explanation for the way in which internal attributions are potentially formed, they neglected to consider the development of external and combined attributions. Kelley (1973) went on to advance Heider’s (1958) original theory, which distinguished between internal and external attributions, by identifying three factors that influence the development of attributions: (1) consistency, (2) distinctiveness and (3) consensus.

(1) Consistency: In order to determine consistency, the stability of the action will be considered, i.e. does this person always act in this way in the specific situation, even at different times? If so, and the behaviour is seen as stable and consistent, then an internal attribution is likely to be made. In contrast, if the behaviour is seen as inconsistent and unstable, then an external attribution is more likely to be made.

(2) Distinctiveness: The distinctiveness of the behaviour or action will be determined by considering whether the person engages in the same behaviours with different people or in different situations. If a person acts similarly with other people or in other situations, this suggests that there is low distinctiveness about the behaviour and an internal attribution is likely to be made. On the other hand, if a person acts very differently in other situations, it is more likely that an external attribution will be made as it deems the behaviour high in distinctiveness.

(3) Consensus: If a person's behaviour is deemed to be unusual or not what might be considered consistent with the social norm in that particular circumstance, then it is more likely that an internal attribution will be made. However, if a person behaves how most people would, then an external attribution is more probable.

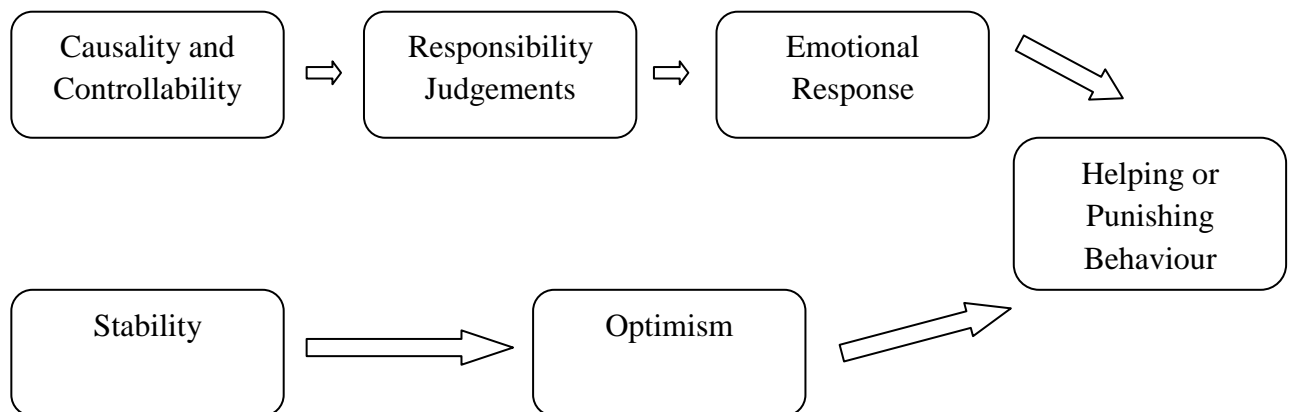
Whilst this theory is helpful in exploring some of the potential dimensions on which behaviour is rated in order to understand how attributions are formed, it also has some drawbacks. Firstly, in order to assess behaviour on each of the domains of consistency and distinctiveness, it requires a person to have witnessed the behaviour more than once and in more than one environment. This makes it of limited utility when considering mental health stigma, in particular stigma by mental health staff, as often clinicians will only see a client in one setting, for example in an office, or at their home, etc. Secondly, it does not consider inferences about the perceived intention of a person's behaviour and the effect that this may have on attributions. These limitations mean that Kelley's theory (1973) is unlikely to be able to provide a comprehensive explanation for the presence and maintenance of negative attitudes and stigmata held by clinicians towards certain client groups or diagnostic labels. More recent research by Weiner (1980, 1985, 1986, 1995) into the development of attributions considers this a particular weakness of Kelley's theory, as it is now

thought that intentionality creates the link between attributions, emotions and behaviour.

1.4.3.4 Weiner's (1980, 1985, 1986, 1995) theory of causal attribution.

Weiner's causal attribution theory (1980; 1985; 1986; 1995) attempts to address some of the limitations in the assertions made by Kelley (1973). Weiner described three causal dimensions: (1) stability: whether there will be change over time; (2) controllability: whether a person has control over the causes of his/her behaviour, and; (3) locus of causality: whether the cause of the behaviour is internal or external. Weiner suggested that attributions on each of these domains will result in emotional reactions which affect judgements regarding the person's responsibility for the behaviour and consequently will affect the likelihood of an individual engaging in helping or punishing behaviours (Figure 2).

Figure 2. Weiner's Causal Attribution Theory (1995)



Weiner's theory of causal attribution (1980; 1985; 1986; 1995) has been applied to many areas of social psychology, although, more recently, it has begun to be used as a theoretical model for the process of stigma towards mental illness.

Weiner (1995) suggests that when presented with a situation such as mental illness,

people try to determine who is responsible and, in doing so, they make attributions regarding the causality and the controllability of the mental illness. These causal attributions then progress to judgements regarding the assignment of responsibility for the situation. Therefore, if it is deemed that the event, in this case mental illness, is caused by the individual and is within their control (these are common attributions when mental illness is a result of substance abuse, for instance), then the person with the mental illness is likely to be held responsible for their situation which may lead to negative affective responses, such as anger, potentially resulting in punishing or discriminatory behaviour (Corrigan, Markowitz, Watson, Rowan & Kubiak, 2003). On the other hand, attributions whereby the individual is perceived to not be in control of their situation, i.e. an external attribution of causality and low controllability, are likely to result in a belief that the individual is not responsible for their mental condition and may lead to emotional responses such as pity or sympathy, and are more likely to lead to helping behaviour.

In terms of the dimension of stability, when stability of an individual's behaviour or condition is perceived as low, this is likely to generate feelings of optimism for change, also leading to a greater desire to engage in helping behaviour. Conversely, if attributions of high stability are made then optimism for change is likely to be low, potentially leading to more discriminatory behaviour.

This model may be helpful when considering the way in which stigma is formed and maintained among mental health staff towards specific groups of service users, due to the fact that it suggests that clear theoretical constructs (i.e. controllability, stability and causality) form the path between signals, stereotypes and behaviour. In this respect it provides a much richer explanation than the generic social cognitive models of stigma and, consequently, may be a much more helpful model for

understanding the relationship between stigma and its effect on helping/discriminatory behaviour (Corrigan et al., 2003). It allows for specific research to take place about why certain stereotypes are held and what could be done to change or shift them, which would be likely to have a positive effect on clinical practice (Strong, 2010). It is for this reason that Weiner's model has been widely used in the literature, in particular to investigate clinicians' views of challenging behaviour from various client groups (Willner & Smith, 2008).

However, despite being more theoretically sound than the models previously described, it may still impose some limitations when considering the role of stigma within individuals working in the mental health profession. More recent research into social stigma has indicated that controllability is not necessarily the sole attribution that people make about those with mental illness (Corrigan et al., 2001); rather attributions regarding dangerousness are also made (Phelan, Link, Stueve & Pescosolido, 2000). It might be hypothesised that the recent political move to create specialist 'Dangerous and Severe Personality Disorder' units in high security prisons and hospitals, and the media coverage associated with this, will impact on attributions of dangerousness towards individuals with personality disorder. However, it is as yet unclear whether dangerousness impacts on helping behaviour because it relates to the causality dimension of Wiener's model (1980; 1985; 1986; 1995) or whether it is because it impacts on the affective response, e.g. evoking fear. Previous studies have indicated that this attribution of dangerousness is associated with an increased desire to socially distance oneself from a person with mental illness and a belief that the person with a mental illness should be segregated (Pescosolido, Monahan, Link, Stueve & Kikuzawa, 1999).

A further limitation of Weiner's model (1980; 1985; 1986; 1995) is that previous experience of a diagnostic label can influence attributions that are made on all domains, which is not encompassed by Weiner's theory. For example, a study by Bowers (2002) demonstrated that staff who held a negative view of clients with a personality disorder favoured more coercive and punishing management strategies. Given that Weiner's model only considers behaviour to be a signalling event, findings from studies such as this confirm that many other stimuli can also be used as signals, including the diagnostic label itself.

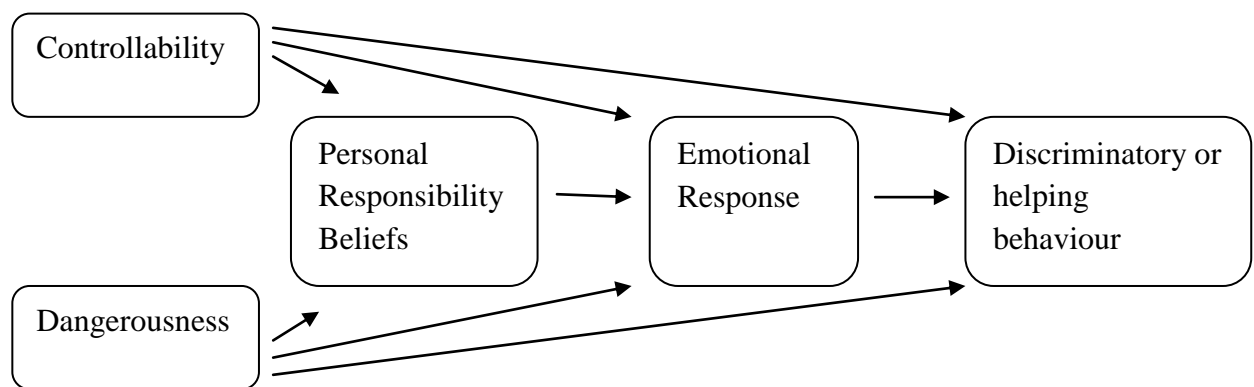
A further limitation of Weiner's theory (1980; 1985; 1986; 1995) is that it focuses solely on the distinction between helping and punishing behaviour. Whilst this may be of value when exploring stigma towards mental illness in the general public, this is likely to cause difficulties when attempting to use this model to explore stigmatisation by mental health professionals. This is due to the fact that clinicians are expected, and indeed paid, to help those with mental health difficulties, thus influencing their behaviour. It may therefore be considered that, rather than the resultant behaviour being about intentionally withholding help or punishing, it may be more appropriate to consider general withdrawing behaviour, some of which may be unconscious, such as avoidance or prioritising other patients, which is not taken into account by Weiner's model.

1.4.3.5 Attribution model of public discrimination towards a person with a mental illness (Corrigan et al., 2003).

Due to the concerns described above regarding the applicability of Weiner's theory (1980; 1985; 1986; 1995) of causal attribution, it may not be considered entirely applicable to the explanation of stigmatising attitudes and associated

behavioural responses when focussing on mental health staff. Corrigan et al's (2003) mode of public discrimination towards a person with a mental illness may assist in rectifying some of the limitations of Weiner's model when considering stigmatising attitudes within this population and is the most recent attribution model that attempts to explain public discrimination towards those with a mental illness and is outlined in Figure 3.

Figure 3. Corrigan et al's (2003) Model of Public Discrimination Towards a Person With a Mental Illness



The model proposed by Corrigan et al. (2003) implies that controllability and dangerousness explain the relationship between stigmatising attitudes and consequent behaviour. The model suggests that, when the causes for mental illness are believed to be under a person's control, discriminatory behaviour (such as coercion, social distance and a reduction in helping behaviour), negative affective responses (such as anger, fear and lack of sympathy or pity) and personal responsibility judgements are all likely to increase. This model also asserts that, in part, a) personal responsibility beliefs mediate the effects of controllability on emotional responses and the effects of controllability on discriminatory responses, and b) emotional responses also partially mediate the effects of responsibility beliefs on behaviour.

Whilst the model by Corrigan et al. (2003) shares many similarities with Weiner's (1980; 1985; 1986; 1995) earlier theory, including attributions of controllability and the impact of personal responsibility beliefs, there are also several important differences which address some of the limitations of Weiner's model. Firstly, the model proposed by Corrigan et al. was developed specifically to explore reactions to a mental illness label. This, therefore, means that much of the research conducted using this model has used mental health labels for signals (Corrigan et al., 2001; Corrigan et al., 2003; Corrigan, 2005, Strong 2010), as opposed to Weiner's theory where the signalling event has often been behaviour. As previously discussed, it is important to consider stigma and attitudes associated with mental health labels or diagnoses alone, as often this is one of the first pieces of information received by staff prior to having any contact with the client and it is therefore important to know how this might affect the clinician's propensity to help or discriminate. Thus, if, for example, a client is perceived as dangerous based on their diagnosis alone, then it is possible that this may lead to behaviours such as avoidance, despite having little or no evidence that the client poses any risk.

A second difference to Weiner's (1980; 1985; 1986; 1995) model is that Corrigan et al (2003) specifically name the discriminatory behaviours that are likely to result from attributions and associated emotional responses as coercion, segregation and avoidance. Whilst Weiner proposed that a likely outcome would be 'punishing behaviour', the behaviours that this might encompass were not specifically named. By naming these likely outcomes on the basis of empirical evidence regarding staff approaches to managing and treating individuals with mental health difficulties, this allows research to be more focussed and to identify constructive ways in which these behaviours can be altered to improve clinical practice. Findings from using the

Corrigan et al. model also indicated that familiarity and knowledge about mental illness mediated personal responsibility and dangerousness attributions in the general public (Corrigan et al., 2003).

Previous findings by Corrigan et al., (2003) have indicated that this model provides a good framework for understanding the process of stigma towards mental illness amongst the general public. However, on the basis of several preliminary studies, it is also likely that the utility of this model can be extended to clinicians' responses to service users assigned specific mental health labels, in particular those labelled with borderline personality disorder (Markham, 2003; Strong, 2010). This would provide support for the role of dangerousness attributions and the specific types of discriminatory behaviour, as proposed by Corrigan et al.

1.5 Review of the Current Literature

As we have seen, mental health practitioners tend to hold more negative and stigmatising attitudes towards service users with a personality disorder than towards clients with other psychiatric diagnoses. Several cognitive models that may mediate these stigmatising attitudes have also been discussed along with their strengths and limitations. A systematic literature review was undertaken of studies that investigated staff attitudes and attributions to the general label of personality disorder (not including research into specific subtypes) with a view to considering the utility of the various attribution theories discussed in explaining the formation of these stigmatising attitudes.

1.5.1 Method.

Studies were obtained from four online databases: British Nursing Journal (BNI), MEDLINE, CINAHL and PsychINFO. Table 1 shows the search terms and Boolean connectors used:

Table 1

Search terms and Boolean Connectors for Searching Online Databases

BNI	MEDLINE & CINAHL	PsychInfo
'Personality disorder' OR Psychopath*2	'Personality disorder' OR Psychopath*2	'Personality disorder' OR Psychopath*2
AND	AND	AND
Attitude (exploded to 'Staff Attitudes')	Attitude (exploded to 'Attitude of Health Personnel')	Attitude (exploded to 'Health Personnel Attitudes')

Keywords were searched for in title and abstract fields. The search was limited to adult participants (aged 18+) and written in the English language. No date limits were set.

BNI produced 12 articles, MEDLINE returned 32 articles, CINAHL yielded 36 articles, and PsychInfo produced 73 articles. After combining these and removing duplicates, 118 original articles were retained.

These 118 articles were screened for suitability. To be deemed suitable, articles had to fulfil two criteria: (1) focus on clinical staff currently working in mental health settings; (2) focus on staff attitudes to the general label of personality

disorder, as opposed to a specific personality disorder subtype. The second criterion was deemed important as, currently, the vast majority of research focuses on the ‘borderline’ subtype. Also given the high prevalence of the PD-NOS diagnosis and the significant heterogeneity within subtypes, as previously discussed, it may be considered that much of the research into individual subtypes may not be reliably generalisable. Eight articles fulfilled the criteria. The references of these articles were then manually searched, producing another 2 suitable documents (one unpublished report and one published article).

1.5.2 Results.

The ten studies included in the present review are summarised in Table 2.

Table 2

Studies Investigating Staff Attitudes Towards the Label ‘Personality Disorder’

Reference	Objective	Participants	Design	Outcome
Bowers, Alexander, Simpson, Ryan & Carr-Walker (2007)	Explore and attitudes to aggression and personality disorder in relation to containment methods	114 student psychiatric nurses	Quantitative (ACMQ; POAS; APDQ)	Nurses had negative attitudes towards clients with personality disorder, believing they required intensive containment methods.
Bowers, McFarlane, Kiyimba, Clark & Alexander (2000)	Assess factors underlying and maintaining nurses attitudes to patients with	Psychiatric nursing staff from high secure settings: 651 quantitative, 121	Qualitative (APDQ) and Quantitative (semi-structured)	Nurses in high security settings hold negative attitudes towards personality

	personality disorder	qualitative	interview)	disorder patients
Lewis & Appleby (1988)	Assess Psychiatrists attitudes towards the personality disorder label	240 Psychiatrists	Quantitative (rating vignettes on 22 semantic differentials)	personality disorder diagnosis leads to pejorative attitudes and encourages rejection
Mason, Caulfield, Hall & Melling (2010)	Establish whether differences in perceptions of personality disorder existed between Nurses and other professionals	416 forensic psychiatric nurses and 129 non-nursing clinicians	Quantitative	The label of personality disorder creates a perception of a person who needs 'managing' with less opportunity for a positive clinical outcome
Mason, Hall, Caulfield & Melling (2010)	Assess differences in nurses perceptions of personality disorder and mental illness	416 qualified psychiatric nurses across high, medium and low security	Quantitative	Clients with personality disorder are considered less clinically responsive and pose more management difficulties than clients with MI
Newton-Howes, Weaver & Tyrer (2008)	Assess the attitudes of clinicians working with personality	Complete populations in addiction teams and CMHTs (number	Quantitative (PAS-Q; CPRS; CAN; SFQ)	Those with a personality disorder diagnosis were perceived as more difficult to manage than non-personality

	disorder clients	undefined)		disorder clients
Purves & Sands (2009)	Investigate the attitudes of triage and crisis clinicians towards clients with personality disorder	61 mental health professionals	Quantitative (APDQ)	Crisis and triage clinicians hold negative attitudes towards those with personality disorder
Richman, Mercer & Mason (1999)	Explore how psychiatric nurses attribute the notion of 'evil' to deviant behaviour	30 psychiatric nurses	Qualitative (vignette study)	Clients with personality disorder and who commit deviant acts are considered 'evil'
Stalker, Ferguson & Barclay (2005)	Explore the views of staff and service users on the meaning and utility of the personality disorder label	12 service providers and 24 service users	Qualitative	Service providers were aware of clinician's negative attitudes to personality disorder
Webb & McMurrin (2007)	Examine attitudes of community nursing staff towards clients with personality disorder	117 Community mental health Team (CMHT) nurses	Quantitative (APDQ)	CMHT nurses feel less secure, accepted and purposeful when working with clients with personality disorder.

Note. ACMQ = Attitude to Containment Measures Questionnaire (Bowers,

Alexander, Simpson, Ryan & Carr-Walker, 2007); POAS = Perception of Aggression

Scale (Jansen, Dassen & Moorer, 1997); APDQ = Attitudes to Personality Disorder Questionnaire (Bowers & Allan, 2006); PAS-Q = Quick Personality Assessment Schedule (Tyrer, 2000); CPRS = Comprehensive Psychopathological Rating scale (Montgomery & Asberg, 1979); CAN = Camberwell Assessment of Need (Phelan et al., 1995); SFQ = Social Functioning Questionnaire (Tyrer et al., 2005).

1.5.3 Discussion.

The outcomes of studies detailed in Table 2 mostly indicate that psychiatric staff hold negative attitudes towards clients with personality disorder which is likely to impact negatively on helping behaviour. However, it is of note that none of the above studies directly researched or attempted to understand these attributions and associated behaviours in relation to any theoretical underpinning. This discussion will attempt to evaluate the strength and utility of these research findings in relation to the attributions held by staff. Moreover, it will attempt to consider these findings in relation to the various attribution theories previously described and consider the utility of these theories in understanding staff stigma towards clients with personality disorder.

1.5.3.1 Attitudes towards the diagnostic label of personality disorder:

Vignette research.

1.5.3.1.1 Nursing staff.

Bowers, McFarlane, Kiyimba, Clark & Alexander (2000) examined responses of 651 nursing staff in high secure forensic settings on the APDQ. Subsequently, the APDQ has demonstrated good internal consistency (Cronbach's alpha .94) and test-

retest reliability, and is a valid measure for use with various mental health professionals (Bowers & Allan, 2006).

Subjects endorsed more negative affective statements than positive. Of the negative statements, those least likely to be endorsed were feelings of oppression and powerlessness. This is in contrast to other studies, particularly those using community populations (Webb & McMurrin, 2007), where staff frequently report feeling powerless when working with this client group. Nevertheless, fewer than 20% of the high security nurses studied expressed any optimism about the treatment of clients with personality disorder, although interestingly, those working in specialist personality disorder units were more likely to express optimism. However, findings from this study should be interpreted with caution as it is unclear whether this is mediated by other factors e.g. training, cognitive dissonance, a therapeutically orientated culture in personality disorder wards, etc.

Findings from the qualitative aspect of the study by Bowers et al. (2000) were that those with positive attitudes to clients with personality disorder placed greater emphasis on nurture as a cause of difficulties, believing clients had diminished responsibility resulting from a distorted world view. Subjects with positive attitudes demonstrated greater awareness of environmental management and violence prevention strategies, were less likely to have been attacked, and were more likely to have insight into emotional reactions. The opposite was the case among staff that held more negative views. It should be noted that the direction of causality cannot be inferred. However, given the specialist nature of high secure settings, generalisation of these findings should be undertaken cautiously.

These findings provide tentative support for Corrigan et al's (2003) conclusions which suggest that familiarity with, and knowledge about, a mental illness, or in this case personality disorder, is likely to mediate personal responsibility beliefs, as it is likely that those working on personality disorder specific wards may have had greater training and more clinical experience of this population, including the reading of case notes and a potentially greater understanding of the effects of childhood trauma. Moreover, this may also demonstrate support for the pathway between stability and optimism, as suggested by Weiner (1980; 1985; 1986; 1995). It may be considered that an increased understanding of personality disorder leads to improved clinical care and management, thus resulting in more changeable behaviour being observed (i.e. potentially more frequent opportunities to observe clients not displaying the 'typical' behaviour expected from a client with personality disorder). In light of Weiner's model, it could therefore be suggested that it is this variability in behaviour that creates the potential for optimism amongst nursing staff.

Similar results to those found by Bowers et al. (2000) were echoed in a study by Richman, Mercer, and Mason (1999). This qualitative study was conducted around discussion of six vignettes, considering constructs of mental health difficulties (no diagnosis was given) and acts of violence. Subjects were 30 psychiatric nurses from Ashworth Hospital. Findings indicated that staff did not perceive the person who committed a violent act to be 'evil' if lodged within a psychiatric label, such as schizophrenia, perceiving them not to be responsible for their actions/thoughts, and not to possess rationality. In contrast, clients depicted as possessing features of personality disorder were granted no such entitlement, rather labelled as 'evil', with subjects inferring they had deliberately chosen and consciously undertaken the violent acts. Once again this is indicative of support for the idea that diagnostic labels can act

as signalling events to initiate the controllability pathway leading to personal responsibility beliefs, consistent with the model of Corrigan et al (2003).

All vignettes in this study were derived from real cases, increasing ecological validity. However, once again these findings must be interpreted with caution. Participation was voluntary and selection bias may impact upon representativeness of the sample.. Reliability and validity of the data must also be considered in the light of the political climate at Ashworth Hospital at the time of data collection, which took place during the Fallon Inquiry (Fallon, Bluglass, Edwards, & Daniels, 1999), when all disciplines were criticised for the poor management of the personality disorder unit. This may have strengthened negative attitudes towards personality disorder clients, and consequently generalisability to current staff attitudes is questionable.

Findings from Webb & McMurrans' (2007) study support the notion that results from studies utilising nursing subjects from high secure settings cannot necessarily be generalised to community settings. As previously suggested, this may be in relation to the findings of Corrigan et al (2003) regarding familiarity with the diagnosis and the likelihood of increased training in high secure settings. Webb & McMurrans (2007) found CMHT nurses reported enjoying working with clients with personality disorder. However, in comparison to other groups, including high secure nurses and prison staff (as reported by Carr-Walker, Bowers, Callaghan, Nijman, & Paton, 2004), they felt less secure, accepting and powerful in their role. A strength of this research is the use of the Attitudes to Personality Disorder Questionnaire as it is a commonly used measure in determining staff attitudes, allowing comparisons to be easily drawn with other studies. However, the utility of this evidence is questionable as information was not gathered about experience, training, age or gender of subjects

and all subjects were from one NHS Trust, introducing bias based on services available and staff culture in that area.

1.5.3.1.2 Other clinical staff.

Lewis & Appleby's (1988) study drew similar conclusions to those studies previously described using a vignette study. Results suggested that among psychiatrists the personality disorder label elicits pejorative, judgemental, and rejecting attitudes. Interestingly, they found significant differences between the perceived suicide risk of clients with and without a previous personality disorder diagnosis, suggesting that this diagnostic label affects judgements of risk to self which could have serious repercussions. It is interesting to consider this in light of Corrigan et al.'s (2003) hypothesis regarding the influence of attributions regarding dangerousness. Whilst it is assumed that dangerousness implies risk to others, it is unclear whether risk to self may form part of this attribution. It is also of note that, even when psychiatrists disagreed with the previous personality disorder diagnosis, they held more critical attitudes towards the client, perceiving difficulties to be more under the client's control. This resulted in lack of sympathy and a belief that the client was undeserving of NHS time, demonstrating that the personality disorder label is encouraging rejection. Once again, this provides support for both Weiner's (1980; 1985; 1986; 1995) and Corrigan et al.'s suggestions that high attributions of controllability invite a belief that the client is responsible for his/her difficulties, thus resulting in negative affective responses. It also suggests that diagnosis alone is enough to act as a signalling event, as opposed to Weiner's suggestion that the signalling event is an observed behaviour.

Although Lewis & Appleby (1988) draw compelling conclusions, they do not report how the vignettes or questionnaire were constructed, validated and assessed for reliability. Although vignettes allow for greater experimental control, previous research indicated that different constructs are investigated when using vignettes and real clinical examples (see Lucas et al. (2009) for further discussion of this). No justification for sample size was reported and, although subjects were randomised to the vignettes, they do not specify numbers in each group. It also does not account for attitudes towards depression (all vignettes depicted a depressed client), previous training, and experience with this client group. Considering this research was conducted in the 1980s, it would be beneficial to know about training received by subjects, allowing for comparison with current training, prompting consideration of how these findings may be generalised to psychiatrists practising today.

Purves & Sands (2009) used similar methods to Webb & McMurrin (2007) using an Australian sample derived from crisis and triage teams, including nurses alongside a broader range of clinical professions. They report that, overall, clinicians reported more negative than positive attitudes towards working with clients with personality disorder. A strength of this research was they had a relatively large sample size (110 subjects), although there is no indication of how this sample size was calculated and whether the study reached adequate power. They also collected demographic information, drawing correlations between age, experience, and training and attitudes, which was cited as a limitation of Webb & McMurrin's study. However, there appears to be some confusion with regards to their analysis, casting doubt upon findings. The APDQ utilises a six-point Likert scale, making data continuous. Purves & Sands dichotomised their data into 'good' and 'bad' categories, without justification or reporting cut-offs for each category. This is concerning as

meanings of increments on Likert scales are subjective. Consequently, it is difficult to interpret reliably the meaning of these results and whether they accurately capture attitudes in clinical practice.

In comparison to the previous studies, Stalker, Ferguson & Barclay (2005) consider working with clients with personality disorder from the point of view of service providers rather than individual clinicians. Results from this qualitative study demonstrated service providers were aware of clinicians' attitudes (i.e. that the difficulties are internalised in the client, perceived to be untreatable, perceived as difficult or challenging to work with, etc). The service providers interviewed struggled to provide examples of good practice that they had observed within their service towards this client group. This is once again suggestive of the idea that the various attribution theories discussed may be relevant, with this study demonstrating the scale to which discriminatory and helping behaviours are associated with negative attitudes. The respondents in this study were from diverse clinical backgrounds, and three of the 12 services included were from the voluntary sector, indicating these views are generalisable outside of the NHS, although it was unclear how spokespeople were nominated. It is also unclear what types of services were being provided. It should be noted that all service providers were from Glasgow only, thus the generalisability to other areas is questionable without further multisite research.

1.5.4 Attitudes towards clients with personality disorder: Attitudes to specific service users under the care of clinicians.

The previous studies considered above have evaluated judgements based on knowledge or hypothetical vignettes. In contrast, the study by Newton-Howes, Weaver & Tyrer (2008) involved subjects making ratings based on particular clients

under their care. A variety of mental health professionals working in community settings rated clients on a battery of measures (see Table 2) and, from this 400 clients were randomly chosen for case note review. Results suggested that when compared to non-personality disorder clients, mental health professionals believed those with personality disorder to be more globally difficult to manage, more aggressive and less compliant. The investigators also report that those with 'overt' personality disorder (those with clinical diagnosis who also met diagnostic criteria on the assessment measures) were deemed globally more difficult to manage, more chaotic and more aggressive than those with 'covert' personality disorder (those who met diagnostic criteria on the assessment measure but did not have a clinical diagnosis). This difference could not be accounted for by objective measures of social need, social functioning, and aggression; however the 'overt' group had statistically more psychopathology as rated by the CPRS. When considering these findings in light of the model proposed by Corrigan et al. (2003), it may be assumed that the belief that this client group are more aggressive could relate to the dangerousness pathway and the belief that they are more difficult to manage and less compliant may be assumed to lead to discriminatory behaviours such as coercion. However, the fact that these elements were not specifically measured means that these can only remain assumptions and causality cannot be inferred.

The strength of this research is its focus on real clients, increasing ecological validity of the findings. It was conducted across four localities assessing complete populations in addiction services and CMHTs. This is a strength as it considers a wide variety of clinical staff, although it is unclear how these sites were selected and if any staff refused to complete the study, thus the possible impact of selection bias cannot be excluded. Power analysis was not reported and the description of the method was

not easily understandable. Although standardised measures were used, their psychometric properties were not reported, and it may have been beneficial to consider using a measure such as the APDQ to enable ease of comparison.

1.5.5 How attitudes affect clinical practice.

Bowers, Alexander, Simpson, Ryan & Carr-Walker (2007) investigated relationships between student nurses' perceptions of clients with personality disorder and approval of containment methods, with two main findings. Firstly, students who rated greater enjoyment of working with clients with personality disorder considered containment more acceptable, particularly observations, open area seclusion, and physical restraint. This is of interest as these methods all involve increased contact with the client and possibly could be seen as a therapeutic aid. It was also reported that, over the duration of training, students' enjoyment of working with personality disorder declined. These findings are in contrast to evidence presented by Corrigan et al. (2003), who suggested that familiarity with mental illness, in this case personality disorder, reduces negative attributions, particularly in the domains of controllability and personal responsibility, giving rise to an increase in helping behaviour. This could potentially suggest that it is not only the notion of familiarity on a personal level that is at play, rather the overall service culture and knowledge of colleagues' beliefs may also play a part.

Information is not reported about any bias that may have arisen from subjects who declined to consent. Information was also not given about the training being received by the students, the contact they had with clients with personality disorder, or any previous experience or training. This would have been beneficial as it would allow for mediating factors in the decline in enjoyment to be considered. It should

also be noted that the sample was from one university and, prior to the study, they were provided on local service information on the use of various containment methods. In the interests of generalisability, it may have been beneficial to provide NICE guidance on the use of these methods and to investigate more sites.

More recently, Mason, Hall, Caulfield & Melling (2010) studied attitudes of forensic mental health nurses working in secure services, demonstrating that a personality disorder diagnosis lends itself to perceptions that clients must be 'managed', whereas clients with a diagnosis of mental illness are perceived as clinically treatable. Although this finding was evident across all low, medium and high security settings, the difference became less marked as levels of security decreased. This was expanded by Mason, Caulfield, Hall & Melling (2010) who compared the nursing staff data from the above study to non-nursing staff in the same settings. The difference between nurses and non-nurses was negligible, and findings from their previous study in non-nursing clinicians were replicated. These findings demonstrate differences in clinical practice between the care of clients with personality disorder and mental illness: the former are managed, whereas the latter are treated.

A significant limitation of these studies is the measures used. A 20 item questionnaire was developed by the researchers using the Thurstone Scaling Test. The questionnaire items were not reported, making it unclear how findings may be compared to studies utilising standardised measures. There is also no indication of the validity or reliability of this measure. In the study focussing on nurses, the sample size (416) appears adequate with numbers being relatively evenly distributed across security levels. However, when considering non-nurses, there are far fewer clinicians overall (129) with particularly low numbers from high and low security settings.

These uneven sample sizes mean that comparisons between groups must be interpreted with caution. However, the findings from both studies do provide an interesting insight into staff attitudes and how they affect subsequent care planning and helping behaviour, although, as with previous studies, the ability to generalise from these results to community settings is unclear.

1.5.6 Conclusion.

1.5.6.1 Summary of attitudes to personality disorder.

Overall, studies demonstrated clinicians hold negative attitudes towards clients with a diagnosis of personality disorder. Several themes were highlighted across the literature: (1) staff responses towards clients with personality disorder were more negative than towards those clients with other mental health diagnoses; (2) a lack of optimism for treatment outcome, leading clients to being managed, as opposed to treated; (3) a perception that clients' difficulties were internal and under their control if they had a personality disorder diagnosis, leading to critical and rejecting attitudes. It was noted that findings differed in secure settings and in community settings, with the results from community settings being less consistent. Staff who had increased training in working with clients with personality disorder or who had greater contact with them, for example, those from specialist personality disorder units, reported more positive attitudes towards this client group, although mediating factors in this relationship are not reported.

1.5.6.2 Quality of the research.

The research discussed varied in methodological quality. Despite varying sample sizes, none of the studies reported power calculations, making it unclear

whether the reported significance of the results was reliable. Samples were often drawn from single geographical areas/services, indicating results may not be generalisable to other services. In many of the studies there may also have been issues resulting from selection bias, as demographic information of those who did not take part was not reported. This inability to determine whether non-responders differed from consenting subjects casts doubt upon the representativeness of the findings to entire populations of clinicians. It is also considered that many of the studies were correlational, so that cause and effect cannot be inferred. For example, is it the negative staff attitudes that cause clients to behave in a more challenging fashion, or is it the clients' challenging behaviour that results in negative staff attitudes?

The reliability and validity of some of the measures used were also open to question. The APDQ has good reliability and is a valid measure in these populations, although many studies used non-standardised measures, not clearly reporting their development or psychometric properties, casting doubt on their utility and findings. Several of the studies used vignettes or required clinicians to complete questionnaires on the basis of previous knowledge. As discussed, vignettes have been demonstrated to investigate different constructs to 'real' examples, raising questions about the validity and utility of the findings. Many of the studies utilising these methods did not collect or report adequate information about staff training/experience with this client group, making it difficult to infer how this may have affected their attitudes. Several of the studies' researchers should be praised for their attempts to utilise 'real' client examples, enhancing the ecological validity of their findings.

Overall, whilst all the studies discussed appear to report similar findings, suggesting they are valid, it is unclear how reliable they are and the extent to which these findings can be generalised.

1.5.6.3 Applicability of attribution theories.

Whilst none of the studies described above specifically investigated attributions in relation to any of the cognitive attribution theories previously discussed, it can be seen that many of the findings provide some level of support for the notion that these theories may be applicable when considering the factors that result in stigmatising attitudes and the pathways that may lead to helping or discriminatory behaviour. There appeared to be support, in particular, for the mediating effect of attributions of controllability on personal responsibility beliefs. There was also some inferred support for the notion that dangerousness is also likely to mediate personal responsibility beliefs.

However, none of the studies specifically addressed the emotional responses that arise from these attributions and beliefs. Therefore, neither of the pathway models proposed by Corrigan et al. (2003) or Weiner (1980; 1985; 1986; 1995) can currently be wholly supported when considering the relationship between attributions and associated behaviour in mental health staff beliefs about personality disorder.

1.7 Rationale for the Present Study

Previous research indicates that attitudes of clinicians are more negative towards clients who have a diagnosed personality disorder than towards individuals with other mental health diagnoses. Although the literature base has recently begun to consider attribution theories in relation to specific personality disorder subtypes, in particular borderline personality disorder, there continues to be little research specifically identifying how attribution theories relate or are applicable to the overarching label of personality disorder. Attributions are an important concept to consider, as cognitive theories suggest that they lead to either helping or

discriminatory behaviour (Corrigan et al., 2003; Weiner, 1980, 1985, 1986, 1995). Attributions of controllability and dangerousness are particularly important, as they are suggested to lead to the specific discriminatory behaviours of coercion and social distancing, and are associated with decreased helping responses. Thus, this research will focus on the attributions of controllability and dangerousness made by student mental health nurses and the impact that these have on emotional reactions and intended behaviours towards an individual with a diagnostic label of personality disorder and an individual with a diagnosis of an Axis I mental illness (as defined by DSM-IV-TR, APA; 2000).

Both Weiner (1980; 1985; 1986; 1995) and Corrigan et al. (2003) asserted that attributions are associated with emotions and intended behaviours. However, the literature that has been discussed above has not fully explored this association between attributions, emotional responses and intended behaviours. Consequently, this study will investigate the association between attributions of controllability and dangerousness and emotions of fear, anger and pity.

Furthermore, the knowledge base about intended behaviour towards clients with personality disorder is markedly limited. Therefore, rather than rely on previous evidence which suggests that attributions are likely to lead to staff behaving in particular ways, this study will also investigate the intended behaviours of helping, coercion and social distancing towards clients with a label of personality disorder.

The present study will also attempt to address some of the limitations of the study methods employed in literature previously discussed, in particular, the use of vignettes. Vignettes have been demonstrated to investigate different constructs to 'real' examples and the use of individual clinical examples lacks internal validity.

Therefore, the present study will aim to use a different method, whereby participants will be shown a video of an individual and their associated diagnostic label, in order to increase both internal and external validity. It will also aim to address the issue of limited generalisability found in previous research by aiming to recruit participants from various geographical areas. Additionally, the use of mental health nursing students will mean that, whilst their academic experience and teaching with regard to the diagnostic labels may have been similar, they will have undertaken a variety of different placements in various types of settings. It is hoped, therefore, that this will enhance the generalisability of the results to many types of services.

1.8 Research Hypotheses

Hypothesis One:

Mental health nursing students will make more attributions of dangerousness and controllability towards an individual labelled with personality disorder than an individual labelled with schizophrenia.

Hypothesis Two:

Mental health nursing students will experience more feelings of anger and fear and less feelings of pity towards an individual labelled with personality disorder than an individual labelled with schizophrenia.

Hypothesis Three:

Mental health nursing students will be less willing to help and more likely to coerce and socially distance themselves from an individual labelled with personality disorder than an individual labelled with schizophrenia.

Hypothesis Four:

Increased negative attributions (dangerousness and controllability) and negative emotions (anger, pity and fear) will be associated with higher levels of discriminatory behaviour (coercion, social distancing and withholding help) in both the personality disorder and the schizophrenia conditions.

CHAPTER TWO: METHOD

2.1 Overview of the Chapter

This section details the methods that were used to investigate the research hypotheses as outlined in Chapter One. Firstly, the design of the study is reported. Secondly, the characteristics of the participants and the recruitment methods are outlined. The measures and their psychometric properties are then discussed and consideration is given to the relevant ethical issues for this study. Finally, the procedure for conducting the research is described and the intended statistical methods for data analysis are introduced.

2.2 Design

Primarily, this study employed an experimental mixed within subjects design, investigating mental health nursing students' attributions and emotional reactions, and the effect of these on intended behaviour, when presented with an individual labelled with personality disorder or schizophrenia.

To investigate hypotheses one to three, an experimental mixed within subjects design was used. Participants viewed a total of two videos: one depicting antisocial behaviour and the other depicting prosocial behaviour. It was felt that it was important to portray both types of behaviour as the type of behaviour with which an individual presents may in itself influence attributions and emotions. It is recognised that one individual can potentially present with both prosocial and antisocial behaviour with these changes in behaviour possibly being attributable to their mental state and, therefore, including both types of behaviour may increase external validity.

Participants were randomised by the online survey provider into one of two conditions: group one viewed the videos having been told that the person in the videos had a diagnosis of personality disorder; group two viewed the same videos, but were told that the person in the videos had a diagnosis of schizophrenia. To reduce order effects, the prosocial and antisocial videos were administered in a counterbalanced manner. The counterbalancing was also automatically conducted by the online survey provider. After viewing each video, participants then completed an adapted version of the Attribution Questionnaire – 27 (AQ – 27; Corrigan et al. 2003), the Social Distance Scale (Link, Cullen, Frank & Woznaik, 1987) and the Perceived Dangerousness Scale (Angermeyer & Matschinger, 2003). They were asked to complete these questionnaires based on the person they had seen in the videos.

Therefore, for hypotheses one to three, the independent between subjects factor is the diagnostic label attached to the video and this has two levels: personality disorder or schizophrenia. The repeated within subjects factor is the behaviour seen and this, once again, has two levels: prosocial or antisocial. The dependent variables were the participants' total scores on the adapted AQ-27, the Perceived Dangerousness Scale and the Social Distance Scale.

To investigate hypothesis four, a correlational design was used to explore relationships between participant attributions, emotions and intended behaviours across all groups (personality disorder prosocial, personality disorder antisocial, schizophrenia prosocial and schizophrenia antisocial).

2.3 Participants

The participants in this study consisted of 87 mental health nursing students. Participants were recruited from a variety of universities across the United Kingdom,

via social media and through the use of NHS email bulletins. Participant demographics are detailed in section 3.2.2.

2.3.1 Inclusion and exclusion criteria.

To be eligible to take part, at the time of the study, participants must have been enrolled on an undergraduate course in mental health nursing. No exclusion criteria were set.

2.3.2 Rationale for selection of participants.

Much of the previous research into staff attributions towards clients with personality disorder has focussed on qualified inpatient psychiatric nurses (e.g. Markham, 2003; Mason, Hall, Caulfield & Melling, 2010). However, there has been little research into the attributions of student mental health nurses. As previously discussed in Chapter One, it is evident that qualified staff across a variety of disciplines hold attributions towards the personality disorder client group which tend to be more negative than towards clients with other psychiatric diagnoses. It is also important to be aware of the attributions of students in this field, as this will enable a comparison to be made with the current findings amongst qualified staff. If differences are found between the attributions of pre-qualified and qualified staff then this may suggest that further research is warranted to investigate the way in which attributions towards client groups develop over time and with experience.

Whilst it is acknowledged that a variety of different professional disciplines contribute to client care, nursing staff are likely to have more direct and frequent contact with clients than members of other disciplines, leading to their being more likely to disseminate information about the client to other members of the care team.

Given this increased contact, the role of disseminating information, and the fact that nursing staff are often the 'front line' clinicians responding to clients (particularly at times of crisis), it may be argued that it is crucial to understand the attributions and emotional reactions of student mental health nurses and the way in which these impact upon their intended behaviour towards clients.

2.3.3 Sample size.

A priori power calculations were conducted for all hypotheses using G*Power (Faul, Erdfelder, Lang & Bunchner, 2007). Effect sizes were calculated on the basis of findings by Strong (2010). This was deemed to be an appropriate study on which to base effect sizes as the same measures have been used to investigate the differences between attitudes and emotional reactions to a specific personality disorder subtype and an Axis I diagnosis (as determined by DSM-IV-TR; APA, 2000).

For all analysis where it is anticipated that mixed ANOVA will be used, effect size calculations, and thus sample size calculations, were completed for all variables, although only the one to return the largest sample size will be reported here. Based on research by Strong (2010), an effect size of $f = .4$ was calculated on the controllability variable. Therefore, to ensure that hypotheses one to three achieve 80% power at a 5% significance level, it is anticipated that a sample size of 40 will be required for each group.

For hypothesis four, which is correlational, a separate power analysis was conducted. In order for hypothesis four to achieve 80% power at a 5% significance level, 44 participants will be required in each group. This was based on a medium effect size of $r=0.4$. This choice of effect size was informed by the small to medium strength correlations reported by Strong (2010). Strong used vignettes in order to

investigate research questions similar to that of the present study. Given that the present study utilises videos, which is a method not previously employed when investigating staff attitudes to personality disorder, the effect sizes used were based on the more conservative end of the range of effect sizes reported by Strong.

2.3.4 Recruitment.

Participants were recruited from the population of student mental health nurses in the UK. The course directors of 52 mental health nursing courses were approached directly by the researcher by email, requesting dissemination of the study information to their mental health nursing students. The contact details for the course directors were obtained via the UCAS university admissions website. To assist the course directors in making an informed decision, the email contained copies of the information and consent sheets (Appendix A) and a copy of the letter of ethical approval (Appendix B). Of these 52 courses, 14 agreed to disseminate the information, with some requiring that the study also be approved by their internal university ethics board.

In addition to direct recruitment from university courses, the study was also advertised via; (1) social media: The study was advertised in four Facebook groups for cohorts of university students and also on generic mental health nursing interest Facebook pages; (2) internet forums: The study information was posted on three forums with a specific nursing focus; (3) nursing regulatory bodies: The invitation to participate was included as part of an e-bulletin to all members of the Royal College of Nursing; and (4) communications from NHS Trusts: The study information was disseminated to all employees of Norfolk and Suffolk NHS Foundation Trust and Cambridgeshire and Peterborough NHS Foundation Trust, once again as part of a

communications e-bulletin. Finally, the study details were also disseminated by word of mouth.

2.4 Materials and Measures

2.4.1 Overview.

Measures were selected to specifically assess each of the aspects of Corrigan et al.'s model of public discrimination towards a person with a mental illness (2003), taking into account those that have been previously reported in similar research literature. Where required, permission has been sought from authors to use questionnaires. Copies of questionnaires can be found in the relevant appendices.

2.4.2 Videos.

Internet searches were conducted but appropriate videos for the study could not be found in the public domain. Consequently, two short videos were created using an actor. They were developed specifically for this research and each lasted approximately 45 seconds. One video depicted antisocial aggressive behaviour and the other video depicted prosocial behaviour (see Appendix C for scripts). When participants viewed the videos they were randomised to one of two groups; one group was told that the person in the video had a diagnosis of personality disorder, and the other group was told that the person had a diagnosis of schizophrenia.

In previous studies of staff attributions towards clients with personality disorder, the two main methods used have been written vignettes (e.g. Lewis & Appleby, 1988; Richman et al., 1999; Strong, 2010) or clinicians drawing upon personal past experiences of working with clients with a personality disorder (e.g. Newton-Howes et al., 2008; Webb & McMurrin, 2007). However, both of these

methods raise some concerns. Firstly, whilst using clinicians own experiences increases external validity, it in turn reduces experimental control and internal validity due to the wide variety of situations drawn upon. Secondly, whilst written vignettes have been found to be a useful tool for researching attitudes and perceptions (Hughes & Huby, 2002), and allow for good experimental control, they may have low external validity because they cannot reflect all of the complexities of real life (Kinicki, Hom, Trost & Wade, 1995; Loman & Larkin, 1976). This results in different constructs being investigated to when real life situations are used (Lucas et al., 2009). It has therefore been suggested by Kinicki et al. that videotaped vignettes provide a middle ground. Research has indicated that videotaped vignettes are superior to written vignettes as they allow more of the ambiguities surrounding everyday life and individual behaviour to be captured (Loman & Larkin, 1976). Furthermore, Kinicki et al. suggests that videotaped vignettes impose more interpretational demands on participants, thus being more representative of real life situations and are more easily retained and recalled than written vignettes. It was therefore thought that video vignettes would be appropriate for the current study.

It was decided that the service user in the video would be male. This decision was based on the findings of a study conducted by the Office of National Statistics (ONS, 2001) indicating that the prevalence of a diagnosable personality disorder was slightly higher in men (5.4%) than in women (3.4%). Furthermore, previous research has reported that staff are more likely to specifically infer that a female service user would have borderline personality disorder (Adler, Drake & Teague, 1990). The aim of the present study was to consider the broad label of personality disorder, as opposed to a specific subtype, and given that the majority of previous research into staff attributions towards clients with personality disorder has been focussed on the

borderline subtype, it was felt that using a female service user in the videos may resemble this subtype too closely.

In addition to diagnostic labels, attributions are influenced by observed behaviour, which, given the nursing role of participants, is likely to be of an interactive nature. It was therefore decided that the two behaviour types should be depicted in the video by an interaction between 'Tom' and another individual, who participants are informed is 'a member of Tom's care team' and is calling to rearrange a scheduled appointment. In light of this, the videos were created to illustrate a telephone conversation during which only Tom can be seen and heard. This was in order to prevent the characteristics of the 'member of staff' from confounding participants' attributions towards Tom. Each video contains the same actor in the same environment in order to increase internal validity. The scripts for the videos were also matched i.e. each interaction from Tom was scripted to be approximately the same number of words. The use of both diagnostic label and behaviour as a signalling event may therefore be considered to be representative of a clinician's first contact with a patient.

For the purposes of validation, both videos were shown to a sample of eight clinicians working in adult mental health services, including psychologists, nurses and social workers, to assess whether the videos accurately portrayed aggressive and prosocial behaviour. They were not shown any associated diagnostic label alongside the video. Without prior knowledge of the intent of the videos, the viewers were asked to comment on the behaviour displayed by the character. All viewers described the behaviour in the videos with labels with the type of behaviour that the video was intended to depict, e.g. words used to describe the video depicting aggressive

behaviour included 'aggressive', 'angry', 'out of order' and words used to describe the video depicting prosocial behaviour included 'nice', 'polite', 'friendly'.

2.4.3 The Knowledge Questionnaire (James & Cowman, 2007).

In order to collect relevant demographic data, an adapted version of section one of the Knowledge Questionnaire (James & Cowman, 2007; Appendix D) was used. This measure was chosen as it has been used to effectively collect appropriate demographic data in previous similar research, for example Strong, 2010.

The original questionnaire consists of five sections. The first asks the participant to complete demographic information, including age, gender, previous qualifications and work history. This section was adapted for the current study to gain information relevant to the participant population (e.g. information regarding placement experience and previous relevant employment was collected, as opposed to asking how long they had been qualified and how long they had been in their current employment).

2.4.4 Attribution Questionnaire (AQ-27; Corrigan et al., 2003) as adapted by Strong (2010).

Corrigan et al. (2003) developed the original AQ-27 in order to assess the relationships between the components of the attribution model of public discrimination towards a person with a mental illness. The original AQ-27 has nine factors that measure attributions, emotions and intended behaviours towards a hypothetical person with schizophrenia, who is depicted in a written vignette. The nine factors are: blame (which is used to measure the controllability aspect of the model), dangerousness, anger, pity, fear, avoidance, intended helping behaviour,

segregation and coercion. Each of these factors is measured using three statements, with respondents rating how much they agree with each statement on a semantic differential scale from one (not at all) to nine (very much). A higher score indicates greater endorsement of stigmatising attitudes towards the individual in the vignette. When used with lay people in response to written vignettes, Corrigan et al. demonstrated high internal reliability for all of the factors on the original AQ-27, with Cronbach's alpha ranging from .70 - .96. A subsequent study by Peebles et al. (2009) demonstrating Cronbach's alpha for total scores of .77 when used with psychologists and psychiatrists employed in a community mental health setting.

Whilst the original AQ-27 has been used in previous research to successfully identify attributions that both lay people and a small sample of mental health staff hold about a person with a mental illness as depicted in a written vignette (Corrigan et al., 2003; Peebles et al., 2009), an adapted version was used by Strong (2010; Appendix E) when investigating the attitudes of mental health professionals specifically towards a client with a personality disorder. Strong adapted the original questionnaire due to the extreme nature of some of the stigmatising views being measured (e.g. 'if I were in charge of Harry's treatment, I would force him to live in a group home'), which individuals working in a caring profession may find difficult to endorse. It was also suggested that knowledge of legislation and service availability may also confound responses. In light of this, the avoidance, dangerousness and segregation factors were removed, instead using the Social Distance Scale (Link et al. 1987; Hay, 2007) and the Perceived Dangerousness Scale (Angermeyer & Matschinger, 2003) to assess participants' desire for social distance and their attributions of dangerousness. Also, two items from the coercion factor have been adjusted to reduce the extremity of the views being assessed.

Although Strong (2010) found that many of the scales had a Cronbach's alpha of below .7 (controllability=.47, pity = .61, helping= .63, coercion= .67), this is still deemed an appropriate measure for the purpose of assessing attitudes in this population, as it is recognised that the Cronbach's alpha coefficient is likely to increase with more items. Therefore, for a scale of only three items, the alpha values reported are adequately reliable.

2.4.5 Perceived Dangerousness Scale (Angermeyer, Matschinger & Corrigan, 2004).

This measure was developed by Angermeyer et al. (2004) and was based on findings from previous cross cultural stigma research (Angermeyer & Matschinger, 2003). Findings from this research generated a list of nine personal attributes that represent two common stereotypes of mental illness: dangerousness and dependency. For the purposes of this research, only the dangerousness scale (Appendix F) is used, as it forms one of the crucial aspects of Corrigan et al.'s (2003) model of discrimination towards a person with a mental health disorder and replaces the dangerousness factor on Corrigan et al.'s original AQ-27. The dangerousness scale comprises six items.

The dangerousness scale was used in the current study to assess how dangerous participants considered the person in the video ('Tom') to be. Angermeyer et al. (2004) reported good internal consistency (Cronbach's alpha .88) when only the dangerousness scale was used with a lay population sample to investigate attributions towards schizophrenia. Strong (2010) also reported good internal consistency (Cronbach's alpha .76) when only the dangerousness scale was used to investigate attributions towards clients with borderline personality disorder in a variety of mental

health disciplines. Based on these findings, it was considered to be an appropriate tool for measuring attributions of dangerousness in the present study.

This scale comprises six descriptive phrases: aggressive, unpredictable, strange, frightening, dangerous and appearing to lack control. Participants are asked to rate on a Likert scale from one (definitely true) to five (definitely not true) to what extent they feel the descriptions apply to the person in the video. For interpretation, scoring is reversed with higher scores representing greater attributions of dangerousness.

2.4.6 Social Distance Scale (Link, Cullen, Frank & Woznaik, 1987, as adapted by Hay, 2007).

The Social Distance Scale aims to measure participants' desire for social distancing from service users depicted in vignettes. The scale consists of seven items, each representing a range of social relationships, for example allowing the person to care for their child. Respondents were asked to indicate how willing they would be to engage in each of these social relationships with the person in the video. Responses were rated on a five-point Likert scale from one (definitely not willing) to five (definitely willing). Lower scores represent a greater desire for social distance from the person in the video.

In the present study, the Social Distancing Scale has been used in place of the avoidance factor on the AQ -27. This is because it measures less extreme social situations and also it benefits from having a greater number of items, meaning that the construct can be measured more reliably.

The original scale was developed by Link et al. (1987) and reported good internal consistency (Cronbach's alpha .92). Hay (2007) adapted this to contain more appropriate language for a British population (Appendix G) and also demonstrated adequate internal consistency (Cronbach's alpha .87), however both of these studies were with lay populations. Strong (2010) used the adapted measure with a sample of mental health clinicians, once again demonstrating good internal reliability (Cronbach's alpha .81), deeming it an appropriate measure for the current study.

2.5 Ethical Considerations

2.5.1 Ethical approval.

The research was granted a favourable ethical opinion by the University of East Anglia Faculty of Medicine and Health Sciences Research Ethics Committee (Appendix B).

2.5.2 Consent.

To obtain informed consent, participants were provided with a detailed information sheet prior to beginning the study, containing details of the nature of the study, right to withdraw, confidentiality, data protection and a prize draw (Appendix A). Participants were required to tick a box prior to beginning the study to confirm that they had read the information and agreed to take part.

2.5.3 Confidentiality.

Participants were not required to provide any identifiable details during the study. They were, however, asked for basic demographic information so that characteristics of the sample can be examined. This is essential for determining the population to which the results are relevant and their subsequent generalisability.

Participants were asked only for an email address at the end of the survey if they wished to enter the prize draw and/or receive a summary of the research findings. This was not compulsory. Any email addresses provided were stored in a separate file on the server in such a way that it was not possible for them to be linked to a particular participant.

2.5.4 Coercion.

Student mental health nurses were invited to participate either via email (disseminated by their course), word of mouth or social networking sites. Response rates in similar internet studies tend to be low (on average 20-30%). Goritz (2006) reported that providing incentives promotes response and retention in internet research. It was therefore considered beneficial to provide an incentive in the form of a prize draw to participate with the intention of maximising responses and thus the reliability of findings. To participate in the draw, participants were required to provide an email address after completing the questionnaires. The prizes were two £25 vouchers for a popular online retailer.

2.5.5 Deception.

The British Psychological Society Code of Ethics and Conduct (2009) states that intentional deception of clients should be avoided unless “deception is necessary in exceptional circumstances to preserve the integrity of research” (pp. 14). In the current study, a limited amount of deception was required in order to retain the integrity of the data. It was considered likely that if participants were fully aware of the detailed aims of the study, they may have responded in a socially desirable way. Consequently, the information sheet only provided a vague overview of the research aims and did not detail the true title of the study. Rather, participants were informed

that the aim of the research was to explore interactions between staff and service users with various diagnoses. Furthermore, participants were also not informed of the names of the measures that were to be used in the study. Once again this was with a view to reduce socially desirable responding.

2.5.6 Debriefing.

Participants were not immediately debriefed. To debrief may have resulted in difficulties with data collection, as it is likely that other prospective participants would have become privy to the true nature of the study, leading perhaps to an increased risk of socially desirable responding. Participants were given the option to enter their email address, if they wished to receive a summary of the findings upon the completion of the study, where the true aims would be revealed. This included the details of the researcher and relevant support organisations.

2.5.7 Distress.

Participants were required to view two videos and answer questions about attitudes, emotions, and intended behaviour towards particular client groups. There is the possibility that this may have caused distress to some participants by potentially causing them to reflect on unpleasant past experiences, or learning something potentially unpleasant about themselves. The contact details of the researcher and relevant support helpline numbers were provided in the information sheet to allow further support. It was also suggested that participants contact their course or placement supervisor if they should become concerned about a patient as a result of participating in the study.

2.6.8 Data storage.

Once participants had completed the study, their anonymous data were stored on the survey hosting system. This system required a password and only the researcher had access to the data. Once data collection was complete, data were transferred to SPSS and removed from the hosting system. For the duration of the analysis, data were stored on an encrypted memory stick to which only the researcher has access. No paper copies of the data were made. Upon completion, the memory stick was and will continue to be stored securely in a locked archive room at the University of East Anglia for five years in accordance with Good Practice Guidelines for the conduct of psychological research within the NHS (BPS, 2005). After this time, the data will be destroyed.

2.6 Data Collection Procedure

The main method of advertising the study was via mental health nursing courses. The course directors of 52 mental health nursing courses in the UK were approached via email requesting them to disseminate the study invitation to their students. Additionally, the study was advertised on relevant groups on social networking websites, on the Intranet and staff e-bulletin emails for Norfolk and Suffolk NHS Foundation Trust and Cambridge and Peterborough NHS Foundation Trust, in the Royal College of Nursing e-bulletin and by word of mouth.

Upon receiving and clicking on the link for the study, participants were taken directly to an information page where they were provided with information about the research (Appendix A). To ensure informed consent was gained, participants were required to tick a box confirming they have read the information and agreed to take part.

Upon providing informed consent, participants were taken to a page where they completed the demographic section of the Knowledge Questionnaire. Participants were then randomised by the online survey provider into two groups and taken to a page telling them that they were about to view a video of 'Tom', whether Tom's diagnosis was schizophrenia or personality disorder (depending upon which group they were randomised to), and informing them that they were viewing a telephone call between Tom and a member of his care team. They then viewed the first video (either antisocial or prosocial behaviour). Videos were randomly counterbalanced by the online survey provider. Therefore, approximately half of the participants viewed the prosocial video first and the other saw the aggressive video first. All participants were then taken to a page where they completed the AQ-27, Social Distancing Scale and the Dangerousness Scale in relation to this video. Participants were then shown the second video (either antisocial or prosocial; the opposite to the one that they had previously viewed). They were once again taken to a page where they completed the AQ-27, Social Distancing Scale and the Dangerousness Scale in relation to the second video. They then submitted their data by clicking on the 'finish' button.

After submitting their questionnaire data, participants were asked if they would like a summary of the write up on completion of the study and whether they wished to enter the prize draw. They were able to choose either or both of these options and were asked to enter their email address. This was stored separately to the study data, ensuring data remain anonymous.

Throughout, there was a 'withdraw from study' button. If participants chose to withdraw without submitting their data, they were still taken directly to the page

where they could choose to receive a summary of findings and/or enter the prize draw.

2.7 Plan of Analysis

Overall, this study utilised a mixed design, comparing the differences in staff attributions and emotional reactions when presented with clients labelled with personality disorder and clients labelled with schizophrenia. Data were imported to SPSS directly from the online source where it is stored.

2.7.1 Preliminary analyses and descriptive statistics.

Descriptive statistics were used to summarise the demographic information of the sample. This includes, gender, age, placement experience and previous employment experience. This is reported in section 3.1.2.

Descriptive statistics were also used to explore whether data met the assumptions required for parametric analysis. A sample of histograms and Wald statistics can be found in Appendices I and J. This exploratory analysis and subsequent plan of statistical analysis are outlined below.

2.7.2 Statistical analysis of study hypotheses.

2.7.2.1 Hypothesis One: Mental health nursing students will make more attributions of dangerousness and controllability towards an individual labelled with personality disorder than an individual labelled with schizophrenia.

Histograms and Wald statistics were used to determine the distribution of the data on the 'Dangerousness' and 'Controllability' factors across all four groups (personality disorder prosocial, personality disorder antisocial, schizophrenia

prosocial and schizophrenia antisocial). These indicated that all data for these two factors were normally distributed. As a result, a 2x2 mixed Analysis of Variance (ANOVA) will be used to investigate the effects of diagnostic label and the type of behaviour viewed, on participants' scores on the 'Dangerousness' and 'Controllability' variables. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder).

The findings from the ANOVA will be followed up with an independent samples t-test to determine if there is a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable. If a significant 'Behaviour' main effect is discovered, this will also be followed up by paired-samples t-tests. The aim of this will be to determine if the significant difference between the scores for the prosocial condition and the antisocial condition is evident in either one or both of the diagnostic labels. It is considered that t-tests are appropriate for this purpose and that multiplicity will not be an issue, due to the small number of t-tests to be conducted.

2.7.2.2 Hypothesis Two: Mental health nursing students will experience more feelings of anger and fear and less feelings of pity towards an individual labelled with personality disorder than an individual labelled with schizophrenia.

Histograms and Wald statistics demonstrated the majority of the data for the 'Pity' variable to be normally distributed. The only exception to this was the data for the antisocial presentation within the schizophrenia group. This set of data returned a skewness z-value of 2.57. However, from a visual inspection of the histograms, the data did not appear severely skewed.

Howell (2002) states:

Analysis of variance is based on the assumptions of normality and homogeneity of variance. In practice, however, the analysis of variance is a robust statistical procedure, and the assumptions frequently can be violated with relatively minor effects. This is especially true for the normality assumption (p. 340).

In light of this, it is considered that a 2x2 mixed ANOVA will still be an appropriate statistical test to be used with this variable. Therefore, a 2x2 mixed ANOVA will be used to investigate the effects of diagnostic label and the type of behaviour viewed on participants' scores on the 'Pity' variable. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder). This will be followed up by an independent samples t-test to determine if there is a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable. If a significant 'Behaviour' main effect is discovered, this will also be followed up by paired-samples t-tests. Due to the fact that not all of the data on this variable are normally distributed, the findings from the t-tests will also be confirmed by their non-parametric equivalents.

Descriptive analysis demonstrated that the 'Anger' and 'Fear' factors were not normally distributed. Log10 transformations were conducted. However, these did not give rise to distributions that were sufficiently close to normal to justify parametric analysis. As a result of the highly skewed data (see Appendix I), it is considered that it would not be appropriate to conduct ANOVAs as it was for other variables. For meaningful analysis to take place, the data will therefore require re-coding into 'low' and 'high' scores. The demarcation of these scores will be based on the distribution

of data as displayed in the histograms for each variable, with the median score as the cut-off (see Appendix I). Therefore, analysis will be conducted using Pearson's chi-square tests in order to determine whether there is a significant association between the schizophrenia and personality disorder groups in the number of participants who scored 'low' and the number of participants who scored 'high' on the 'Anger' variable and on the 'Fear' variable. One Pearson's chi-square will be conducted for the prosocial responses and another for the antisocial responses on each of these two variables.

It may be argued that some information is lost during the dichotomisation of the data for the purposes of the chi-square analysis, which could affect the test's robustness. Consequently, Mann-Whitney U tests will also be conducted on the undichotomised data with a view to confirming the results from the original chi-square analysis. It is recognised that the polarised nature of the data means that there is likely to be a large number of tied scores on the Mann-Whitney U test. However, Mann-Whitney U tests employ a correction for this and, Seigel (1956) states that, even if there is a very large number of tied scores, the "effect is practically negligible" (p. 125). Again, one Mann-Whitney U test will be conducted for the between groups analysis for the prosocial responses and another for the antisocial responses in order to determine whether there is any significant difference between the means of the diagnostic groups on the 'Anger' and 'Fear' factors.

2.7.2.3. Hypothesis Three: Mental health nursing students will be less willing to help and more likely to coerce and socially distance themselves from an individual labelled with personality disorder than an individual labelled with schizophrenia.

Histograms and Wald statistics revealed that, the 'Coercion' and 'Social Distance' variables were normally distributed across all groups. Therefore, a 2x2 mixed ANOVA will be used to investigate the effects of diagnostic label and the type of behaviour viewed, on participants' scores on the 'Coercion' and 'Social Distance' variables. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder). T-tests will be used as previously described to follow up the results from the ANOVA.

The 'Help' factor was found not to be normally distributed. Log₁₀ transformations were conducted, although once again, these did not give rise to distributions that were sufficiently close to normal to justify parametric analysis. Due to the considerably skewed nature of the data distributions resulting from the marked polarisation of responses (see normality tests in Appendix I), it is considered that it would not be appropriate to conduct an ANOVA and that data will require re-coding into 'low' and 'high' scores in order to conduct a meaningful statistical analysis. Again, the demarcation of these scores will be based upon the distribution of data as displayed in the histogram for this variable, with the median representing the cut-off point for recoding. Analysis will then be conducted using Pearson's chi-square tests in order to determine whether there is a significant association between the schizophrenia and personality disorder groups in the number of participants who scored 'low' and the number scoring 'high' on the 'Help' variable. One Pearson's chi-square will be conducted for the prosocial responses and another for the antisocial responses.

Again, one confirmatory Mann-Whitney U test will be conducted for the prosocial responses and another for the antisocial responses in order to determine whether there is any significant difference between the means of the two diagnostic groups on the 'Help' variable when using the un-dichotomised data.

2.7.2.4 Hypothesis Four: Increased negative attributions (dangerousness and controllability) and negative emotions (anger, pity and fear) will be associated with higher levels of discriminatory behaviour (coercion, social distancing and withholding help) in both the personality disorder and the schizophrenia conditions.

As reported for the previous hypotheses, not all variables met parametric assumptions. Therefore, Spearman's rho correlations, the non-parametric version of the Pearson's r correlation, will be used to investigate the relationship between participants' attributions, emotional reactions and intended behaviours within each of the four groups (pd prosocial, pd antisocial, schizophrenia prosocial and schizophrenia antisocial). The significance of the correlation will be considered using a 0.05 significance level.

CHAPTER THREE: RESULTS

3.1 Overview of the Chapter

This chapter describes the results of the present study. It begins with a description of the sample of participants recruited for the study. This will be followed by an explanation of the data analysis procedure, which will be described in two sections. Firstly, the reliability of the measures will be outlined. This will be followed by the analysis and results in relation to each of the study hypotheses. Finally, the rationale and results of two additional analyses will be described. The chapter will conclude with an overall summary of the results of the study.

3.2 Sample Characteristics

3.2.1 Response rate.

In total, 52 UK mental health nursing university courses were approached with a request for the study information to be disseminated to all cohorts of their students. Of these, 14 courses agreed to disseminate the information. Of those that did not agree, 37 courses did not respond to either the original or the follow-up email request, and one course declined due to their students being invited to participate in many other research studies. In addition to direct recruitment from university courses, the study was also advertised via social media, internet forums, nursing regulatory bodies and communications from two NHS Trusts.

These recruitment methods mean that it is difficult to accurately calculate the exact number of people to which the study information was disseminated, precluding calculation of an exact response rate. However, due to the internet programme used to conduct the survey, it is known that the study site was accessed 852 times. Of these

852 contacts, 87 individuals completed the study. This gives a response rate of 10.2%, which is much lower than the response rate of 20-30% that tends to be found in attitudinal studies (Goritz, 2006).

Of the 87 respondents, all met the inclusion criteria and all questionnaires were completed appropriately. As a result, no participants were excluded from this study.

3.2.2 Sample Characteristics.

The 87 participants in this study are all student mental health nurses enrolled in a UK mental health nursing university course. Recruitment into either the personality disorder or schizophrenia condition was undertaken randomly by the online survey programme, with 46 (53%) assigned to the personality disorder group, and 41 (47%) to the schizophrenia group. Table 3 shows the gender of the participants in each group.

Table 3

Gender of Participants Within Each Group

Gender	Personality Disorder Group	Schizophrenia Group
Male	9 (20%)	11 (27%)
Female	37 (80%)	30 (73%)
Total	46	41

The age of participants was recorded using categories. Table 4 shows the number of participants in each age range for both groups.

Table 4

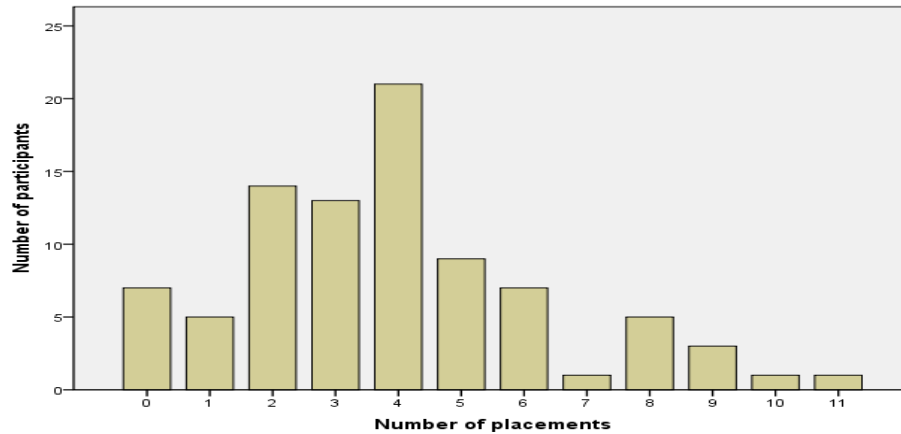
Age Range of Participants Within Each Group

Participant's age	Personality Disorder Group	Schizophrenia Group
18 – 21	9 (20%)	6 (15%)
21 – 25	12 (26%)	7 (17%)
26 – 29	7 (15%)	7 (17%)
30 – 39	11 (24%)	14 (34%)
40 – 49	7 (15%)	7 (17%)
50+	0	0
Total	46	41

All participants were enrolled on a mental health nursing course in the UK. In the entire sample, 19 of the participants were in the first year of their course, 39 were in the second year and 29 were in their third year. In order to ensure that there were no significant differences between the levels of experience/years of study in the two diagnostic groups, a Pearson's Chi-Square analysis was undertaken. This demonstrated that there was not a significant difference in the distribution of experience between the schizophrenia and the personality disorder group $\chi^2 (2, 87) = 3.25, p = .197$.

Figure 4 shows how many placements participants had completed as part of their course.

Figure 4. Number of Mental Health Placements Undertaken By Participants

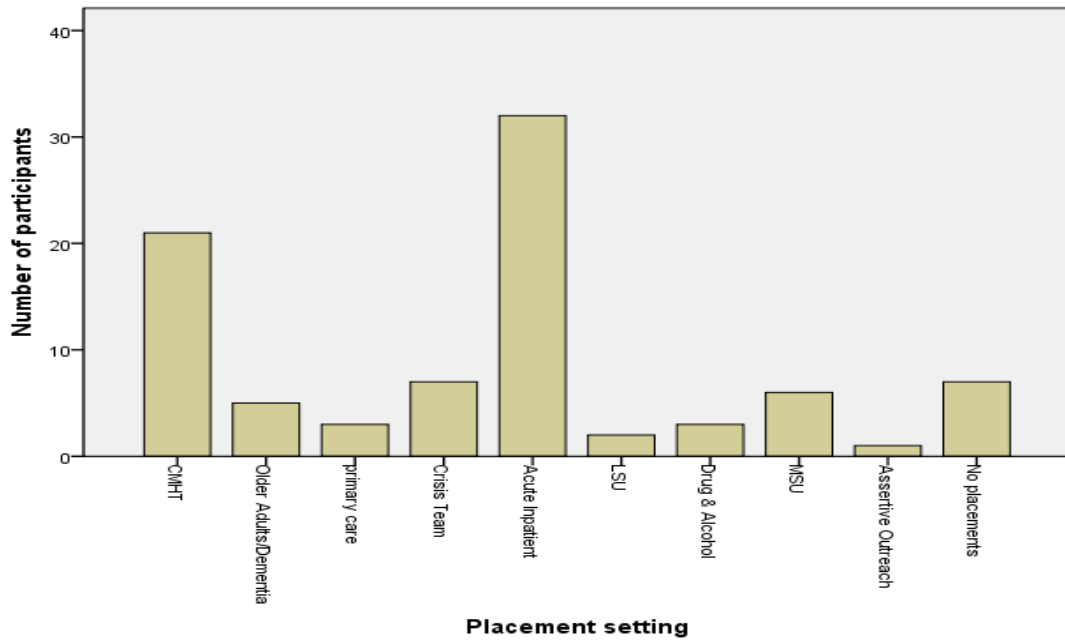


As Figure 4 shows, the modal number of placements was four (range 0-11) with 91% having experienced two to eight clinical placements each of between six weeks and three months duration on average.

Evidence suggests that current working environment and practices influence attitudes (Hastings and Remington, 1994). In light of this finding, participants were asked what type of mental health setting their current placement was in. This is shown in Figure 5.

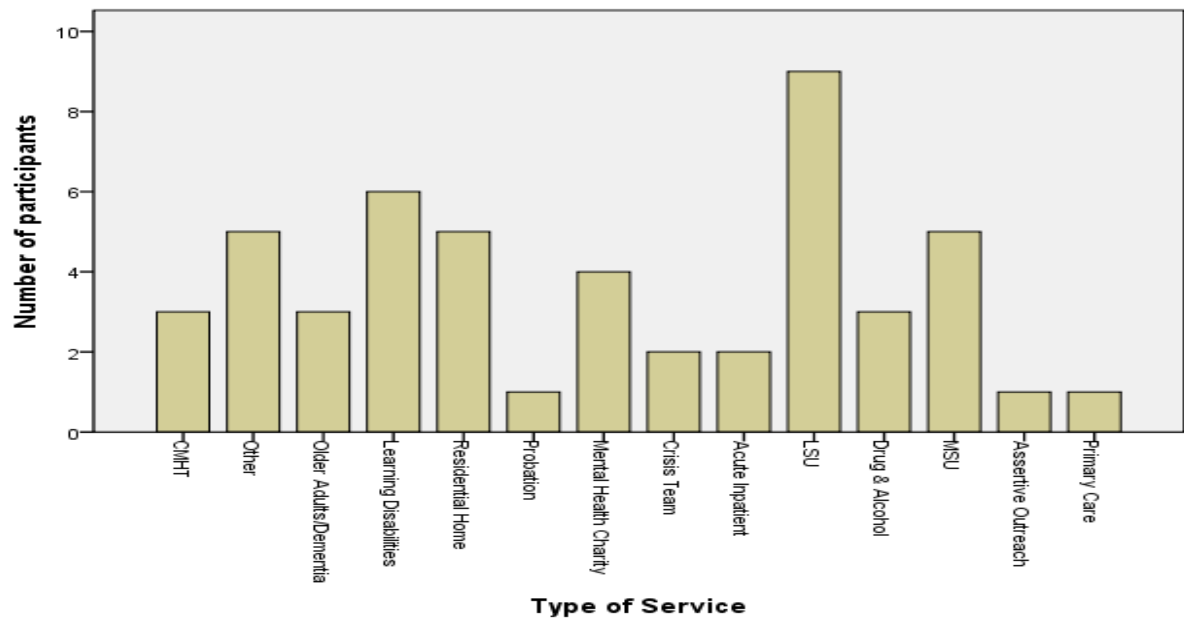
Figure 5 demonstrates that the majority of participants were currently on placement either in an acute adult inpatient environment or in an adult community mental health team.

Figure 5. Number of Participants By Type of Current Clinical Placement Specialty



Of the 87 study participants, 51 (59%) stated that they had also gained experience of working in mental health settings outside of their course, with 36 (41%) having no other mental health experience. The vast majority of participants who had had previous experience had worked as healthcare assistants or support workers (82%), with other job roles including bereavement counsellor, psychological wellbeing practitioner and mentors or befrienders. The settings in which people stated that they had previous experience can be seen in Figure 6.

Figure 6. Number of Participants by Previous Clinical Experience and Setting



3.3 Preliminary Analyses

3.3.1 Internal reliability of measures.

Due to the multiple Likert or semantic differential scale questions involved in all of the measures, Cronbach's alpha (α) was calculated in order to assess the internal consistency of all of the variables and thus determine the reliability of each of the scales (Table 5). It is widely accepted that in order for a scale to be considered reliable, it should achieve a Cronbach's alpha of .7 or above, with a lower coefficient indicating low level of reliability in the scale (Field, 2013).

Table 5

Number of Items and Cronbach's Alpha Value for Each Scale.

Scale	Number of Items	Cronbach's alpha for prosocial video	Cronbach's alpha for antisocial video
Adapted AQ-27 Controllability	3	.556	.476
Adapted AQ-27 Anger	3	.781	.837
Adapted AQ-27 Pity	3	.554	.482
Adapted AQ-27 Help	3	.702	.539
Adapted AQ-27 Fear	3	.906	.910
Adapted AQ-27 Coercion	3	.787	.773
Social Distance Scale	7	.912	.911
Perceived Dangerousness Scale	6	.854	.902

It can be seen in Table 5, that not all of the scales achieve a Cronbach's alpha of above .7, with several scales falling between .476 and .556. However, Cronbach (1951) recognised that the alpha value is affected by the number of items within the scale: the higher the number of items, the greater the coefficient is likely to be.

Voss, Stem and Fotopoulos (2000) suggest that when a scale is particularly short, the mean inter-item correlation can be used to assess whether the small number of items has negatively biased the alpha coefficient. Clark and Watson (1995) suggest that this is a more robust method for ascertaining reliability of scales with minimal numbers of items, as the inter-item correlations are independent of the scale length. Clark and Watson state that a mean inter-item correlation of between .15 and .50 is

acceptable in social science research. In the present study, the scale with the smallest Cronbach's alpha is the Controllability variable in the 'antisocial' group, with $\alpha=.478$. Although this Cronbach's alpha value would generally be considered unacceptable, the mean inter-item correlation is .21. This therefore suggests that this measure of controllability can continue to be used reliably in this study.

3.3.2 Order effects.

Participants were randomly assigned to two groups: Personality Disorder or Schizophrenia. They were also randomly assigned to an order of counterbalancing to determine in which order they saw the videos i.e. prosocial then antisocial, or vice versa. To examine whether there was an order effect, independent samples t-tests were conducted for each variable to determine whether there were significant differences between those who saw the videos first and second. Due to the fact that some of the variables were not normally distributed and the small numbers in each of the four subgroups, Mann-Whitney U tests, the non-parametric version of an independent groups t-test, were also conducted to confirm the findings from the parametric tests.

When using both parametric and non-parametric analysis, all variables, with the exception of 'Fear', demonstrated no significant differences between the responses of those who saw the video first and those who saw it second, across all four variants (i.e. personality disorder prosocial, personality disorder antisocial, schizophrenia prosocial and schizophrenia antisocial). For the 'Fear' variable, there was a significant difference between those who saw the prosocial video first and those who saw it second in the personality disorder group ($p = .009$). Given the number of t-tests undertaken in order to assess whether order effects were present (i.e. four t-

tests for each of the four conditions), it may be possible that this significant result could be an effect of chance. It was considered that it would still be appropriate to incorporate this factor into the analysis, although this should still be borne in mind when considering the results for this individual factor. Moreover, it should also be remembered that order of presentation was not part of the hypotheses to be tested in the study but counterbalancing was included only to control for a potential order effect within each of the two assigned diagnostic groups. There thus appeared to be no contraindication to the assimilation of data across order of presentation within each of the behaviours represented in the videos (i.e. prosocial 1& 2; and antisocial 1& 2), for each diagnostic group.

3.3.3 Normality testing.

As discussed in section 2.7.2, Wald statistics were calculated and histograms were visually inspected to ascertain whether the data were normally distributed for each of the four groups (personality disorder prosocial, personality disorder antisocial, schizophrenia prosocial and schizophrenia antisocial). For all variables, with the exception of Help, Fear and Pity, all Wald statistics fell between 1.96 and -1.96 suggesting that the distributions for all of the above subgroups were normally distributed. Samples of histograms and Wald statistics can be found in Appendix H.

For the variables of Help, Fear and Anger, re-coding of the data was required. Samples of histograms can be found in Appendix I. This will be discussed below with the testing of the hypotheses relevant to these variables.

3.4 Hypothesis Testing

3.4.1 Hypothesis one: Student mental health nurses will make more attributions of dangerousness and controllability towards an individual labelled with personality disorder than an individual labelled with schizophrenia.

3.4.1.1 Dangerousness.

Distributions on this measure satisfied the main requirements for ANOVA: homogeneity of variance and non-significant departure from normality. Therefore, data were consequently analysed using 2x2 mixed ANOVA. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder).

Table 6

Means (and Standard Deviations) of Participants' Total Scores on the Perceived Dangerousness Scale for the Personality Disorder and Schizophrenia Group for Both the Prosocial and Antisocial Behavioural Conditions

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Behaviour	Prosocial	23.07 (5.16)	21.74 (5.45)
	Antisocial	23.71 (5.46)	22.04 (5.54)

Note: Range 0 - 30 (High score = High attribution of dangerousness)

Analysis revealed no significant main effect for behaviour $F(1, 85) = .41, p = .525, \eta_p^2 = .005$. The main effect for diagnosis was also not significant, $F(1, 85) =$

2.76, $p = .101$, $\eta_p^2 = .031$. The interaction effect between behaviour and diagnosis was also non-significant $F(1, 85) = .05$, $p = .823$, $\eta_p^2 = .001$. These results indicate that diagnosis, behaviour and the interaction of these two variables have no effect on participants' scores on the Perceived Dangerousness Scale. In addition, follow-up independent samples t-tests did not detect a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable.

3.4.1.2 Controllability.

Distributions on this measure also satisfied the requirements for ANOVA. A 2x2 mixed ANOVA was used to investigate the effects of diagnostic label and the type of behaviour viewed on participants' scores on the 'Controllability' factor of the adapted AQ-27. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder).

Table 7

Means (and Standard Deviations) of Participants' Scores on the 'Controllability' Factor of the Adapted AQ-27 for the Personality Disorder and Schizophrenia Group for Both the Prosocial and Antisocial Behavioural Conditions

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Behaviour	Prosocial	8.83 (3.58)	9.22 (3.66)
	Antisocial	9.83 (4.10)	10.04 (4.46)

Note: Range 0 - 27 (High score = High attribution of controllability)

Behaviour yielded a significant main effect $F(1, 85) = 5.28, p = .024, \eta_p^2 = .058$, indicating that across both the personality disorder and schizophrenia groups participants scored significantly higher on the controllability variable when viewing the antisocial video than when they viewed the prosocial video. The main effect for diagnosis was non-significant $F(1, 85) = .16, p = .691, \eta_p^2 = .002$. The interaction effect between behaviour and diagnosis was also non-significant, $F(1, 85) = .048, p = .83, \eta_p^2 = .001$. In addition, follow-up independent samples t-tests did not detect a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable.

Paired samples t-tests were used to further explore the finding of a significant ‘Behaviour’ main effect. There was not a statistically significant difference between the prosocial scores and the antisocial scores within the schizophrenia group $t(40) = 1.439, p = .158$. Whilst the difference between the prosocial and antisocial scores proved to be larger in the personality disorder group, it was still not found to be statistically significant $t(45) = 1.947, p = .058$.

3.4.1.3 Summary of results for hypothesis one.

Results of the statistical analysis demonstrate that hypothesis one is not supported. No significant ‘Diagnosis’ main effects were detected between the schizophrenia and personality disorder groups on either the ‘Dangerousness’ or ‘Controllability’ factor. A significant main effect for behaviour was detected on the ‘Controllability’ factor, suggesting that participants scored significantly higher on the ‘Controllability’ factor when viewing the prosocial video than the antisocial video across both diagnostic labels. However, as previously described, reactions to the

different types of behaviour were not part of the hypotheses to be tested, but included only to control for the potential behaviours that may be exhibited by an individual.

3.4.2 Hypothesis two: Mental health nursing students will experience more feelings of anger and fear and less feelings of pity towards an individual labelled with personality disorder than an individual labelled with schizophrenia.

3.4.2.1 Anger.

As previously reported, the data for this variable did not meet parametric assumptions, and so it was not appropriate to conduct an ANOVA. It was considered that the data would require re-coding in order to conduct a meaningful statistical analysis.

The median for all groups was calculated with an average median of four (range three to five). Visual inspection of the histograms confirmed this therefore indicating that a 'low' score would comprise all scores of four and below. 'A high' score, therefore, comprised all scores of four and above. Analysis was then conducted using Pearson's chi-square tests to determine whether there was a significant association between the schizophrenia and personality disorder groups in the number of participants who scored low and the number of participants who scored high on the 'Anger' variable. One Pearson's chi-square was conducted for the prosocial responses and another for the antisocial responses.

Table 8

Number of Participants with Low and High Scores on the 'Anger' factor of the Adapted AQ-27 when Viewing Prosocial Behaviour

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Total Anger Score	Low (0 – 4)	21	17
	High (5 – 27)	20	29

Table 9

Number of Participants with Low and High Scores on the 'Anger' factor of the Adapted AQ-27 when Viewing Antisocial Behaviour

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Total Anger Score	Low (0 – 4)	38	38
	High (5 – 27)	3	8

Results of the Pearson's chi-square demonstrated that there was not a statistically significant association between the assigned diagnostic label and the number of 'low' and 'high' scores on the 'Anger' variable when participants were

shown the prosocial video $\chi^2(1, N = 87) = .126, p = .20$. The association between diagnostic label and ‘low’ and ‘high’ scores on the ‘Anger’ variable was also non-significant when shown the antisocial video $\chi^2(1, N = 87) = 1.18, p = .21$.

Again, Mann-Whitney U tests were used to follow up the results from the chi-square analysis. Results of the Mann-Whitney U tests were consistent with the results derived from the original chi-square analysis, whereby significant differences between the personality disorder group and the schizophrenia group were not found on the ‘Anger’ variable for either the prosocial ($U = 742, z = -1.33, p = .18$) or the antisocial ($U = 842, z = -1.40, p = .16$) conditions.

3.4.2.2 Pity.

A 2x2 mixed ANOVA was used to investigate the effects of diagnostic label and the type of behaviour viewed on participants’ scores on the ‘Pity’ factor of the adapted AQ-27. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder).

The main effect of behaviour did prove to be significant $F(1, 85) = 12.40, p = .001, \eta_p^2 = .127$ with Table 10 demonstrating that participants scored higher on the ‘Pity’ variable when they saw the prosocial video than when they saw the antisocial video, irrespective of diagnostic label. Table 10 indicates that participants scored higher on the ‘Pity’ variable of the AQ-27 after viewing the prosocial behaviour of the patient compared to the antisocial, irrespective of diagnosis. This finding, however is not part of the hypotheses and may be, in any case, a chance finding on a measure which, it is acknowledged, is of lower reliability. More important to the present study is the fact that no significant main effect for diagnostic label was found $F(1, 85) =$

1.47, $p = .230$, $\eta_p^2 = .017$, nor any significant interaction effect between behaviour and diagnosis $F(1, 85) = .23$, $p = .630$, $\eta_p^2 = .003$.

Table 10

Means (and Standard Deviations) of Participants' Total Scores on the 'Pity' Factor of the Adapted AQ-27 for the Personality Disorder and Schizophrenia Groups for both the Prosocial and Antisocial Conditions

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Behaviour	Prosocial	14.66 (5.65)	15.63 (4.95)
	Antisocial	12.55 (5.17)	14.26 (5.07)

Note: Range 0 – 27 (High score = Increased feeling of pity)

In addition, follow-up independent samples t-tests did not detect a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable.

Paired samples t-tests were used to further explore the finding of a significant 'Behaviour' main effect. There was a statistically significant difference between the prosocial scores and the antisocial scores in both the schizophrenia group $t(40) = 2.330$, $p = .025$, and the personality disorder group $t(40) = 2.752$, $p = .009$. Whilst the behaviour main effect is not central to the hypothesis, it is helpful to see that feelings of pity are significantly affected by behavioural presentation.

Due to the fact that the data were originally found not to be entirely normally distributed, Mann-Whitney U tests were conducted for confirmation purposes. The difference between the personality disorder group and the schizophrenia group on their mean pity scores was not found to be significant for either the prosocial condition ($U = 871, z = -.614, p = .540$) or the antisocial condition ($U = 753, z = -1.62, p = .105$). This is consistent with the results found using the 2x2 mixed ANOVA.

3.4.2.3 Fear.

For the same reasons as described for the 'Anger' variable, the data relating to participants' total 'Fear' scores on the adapted AQ-27 also had to be dichotomised into 'low' and 'high' scores.

The median for all groups was calculated with an average median of four (range three to five). A visual inspection of the histograms for this variable confirmed that a 'low' score would comprise all scores of four and below. A 'high' score therefore comprised all scores of five and above. Analysis was then conducted using Pearson's chi-square tests to determine whether there was a significant association between the schizophrenia and personality disorder groups in the number of participants who scored low and the number of participants who scored high on the 'Fear' variable. One Pearson chi-square was conducted for the prosocial responses and another for the antisocial responses.

Table 11

Number of Participants with Low and High Scores on the 'Fear' factor of the Adapted AQ-27 when Viewing Prosocial Behaviour

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Total Fear Score	Low (0 – 4)	20	21
	High (5 – 27)	20	26

Table 12

Number of Participants with Low and High Scores on the 'Fear' factor of the Adapted AQ-27 when Viewing Antisocial Behaviour

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Total Fear Score	Low (0 – 5)	35	39
	High (5 – 27)	6	7

Results of the Pearson's chi-square demonstrated that there was not a statistically significant association between 'low' and 'high' scores on the 'Fear' variable and diagnostic label when participants were shown the prosocial video $\chi^2 (1, N = 87) = .078, p = .67$. The association between 'low' and 'high' scores on the 'Fear' variable

and diagnostic labels was also non-significant when shown the antisocial video $\chi^2 (1, N = 87) = .000, p = 1.00$.

For reasons outlined in section 2.7.2 of the Method section, Mann-Whitney U tests were used to follow up the results from the chi-square analysis. Results of the Mann-Whitney U tests were consistent with the results derived from the original chi-square analysis, whereby significant differences between the personality disorder group and the schizophrenia group were not found on the 'Fear' variable for either the prosocial ($U = 784, z = -.49, p = .62$) or the antisocial ($U = 880, z = -.076, p = .94$) conditions.

3.4.2.4 Summary of results for hypothesis two.

Based on the results reported above, hypothesis two cannot be supported. No statistically significant differences were found between the diagnostic groups on the variables of Anger, Pity or Fear. The only significant effect detected was the 'Behaviour' main effect on the pity variable, which is not central to the hypothesis.

3.4.3 Hypothesis three: Student mental health nurses will be less willing to help and more likely to coerce and socially distance themselves from an individual labelled with personality disorder than an individual labelled with schizophrenia.

3.4.3.1 Help.

As previously reported, the data for this variable did not meet parametric assumptions, and therefore it was not appropriate to conduct an ANOVA. It was considered that the data would require re-coding in order to conduct a meaningful statistical analysis.

The data were dichotomised into ‘low’ scores and ‘high’ scores in view of the markedly skewed nature of the distributions. Visual inspections of the histograms for this variable demonstrated that the skew of the data appeared to be a result of a large proportion of participants scoring at one end of the data range (zero to 27). The median for this variable was 25, therefore for the purposes of re-coding, low scores comprised those participants whose total score on the help factor of the adapted AQ-27 was 25 or below. High scores comprised those who scored 26 or above. Analysis was then conducted using Pearson’s chi-square tests in order to determine whether there was a significant association between the schizophrenia and personality disorder groups in the number of participants who scored low and the number of participants who scored high on the ‘Help’ variable. One Pearson’s chi-square was conducted for the prosocial responses and another for the antisocial responses. Tables 13 and 14 display how many participants fell into the low and high categories for each test.

Table 13

Number of Participants with Low and High Scores on the ‘Help’ Factor of the Adapted AQ-27 after Viewing Prosocial Behaviour

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Total Help Scores	Low (0 – 25)	21	30
	High (26 – 27)	20	16

Table 14

Number of Participants with Low and High Scores on the 'Help' Factor of the Adapted AQ-27 after Viewing Antisocial Behaviour

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Total Help Scores	Low (0 – 25)	17	25
	High (26 – 27)	24	21

The results of the Pearson's chi-square demonstrated that there was no statistically significant association between low and high scores on the 'Help' factor and assigned diagnostic label when participants were shown the prosocial video $\chi^2 (1, N = 87) = .269, p = .20$. The association between low and high scores of the 'Help' factor and diagnostic labels was also non-significant when shown the antisocial video $\chi^2 (1, N = 87) = .324, p = .28$.

For reasons outlined in section 2.7.2 of the Method section, Mann-Whitney U tests were used to follow up the results from the chi-square analysis. Results of the Mann-Whitney U tests were consistent with the results derived from the original chi-square analysis, whereby significant differences between the means of the personality disorder group and the schizophrenia group were not found on the 'Help' variable for either the prosocial ($U = 795, z = -1.28, p = .201$) or the antisocial ($U = 789, z = -1.35, p = .176$) conditions.

3.4.3.2 Coercion.

The data for this factor met the assumptions required for parametric testing. A 2x2 mixed ANOVA was used to investigate the effects of diagnostic label and the type of behaviour viewed on participant's scores on the 'Coercion' factor of the adapted AQ-27. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder).

Table 15

Means (and Standard Deviations) of Participants' Sores on the 'Coercion' Factor of the Adapted AQ-27 for the Personality Disorder and Schizophrenia Groups for both the Prosocial and Antisocial Conditions

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Behaviour	Prosocial	11.49 (5.57)	12.72 (5.18)
	Antisocial	11.51 (5.82)	12.57 (5.89)

Note: Range 0 – 27 (High score = greater desire to coerce)

Results of the 2x2 mixed ANOVA revealed that there was no significant 'Behaviour' main effect $F(1, 85) = 0.31, p = .861, \eta_p^2 = .000$. The above table indicates that there was no significant main effect of assigned diagnosis on participants' perceptions of the 'patient' across both forms of behaviour. $F(1, 85) = .82, p = .339, \eta_p^2 = .011$. Moreover, there was no significant interaction effect between behaviour and diagnosis, $F(1, 85) = .060, p = .809, \eta_p^2 = .001$. In addition,

follow-up independent samples t-tests did not detect a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable.

3.4.3.3 *Social Distance.*

The data for this variable also met the assumptions required for ANOVA. A 2x2 mixed ANOVA was used to investigate the effects of diagnostic label and the type of behaviour viewed on participants' total scores on the Social Distance Scale. The repeated measures factor is behaviour (prosocial or antisocial) and the between subjects factor is diagnosis (schizophrenia or personality disorder).

Table 16

Means (and Standard Deviations) of Participants' Total Scores on the Social Distance Scale for the Personality Disorder and Schizophrenia Groups for both the Prosocial and Antisocial Conditions

		Diagnosis	
		Schizophrenia (N=41)	Personality Disorder (N=46)
Behaviour	Prosocial	27.32 (5.12)	24.41 (6.31)
	Antisocial	27.41 (5.35)	24.41 (6.10)

Note: Range 0 – 30 (High score = greater desire to socially distance oneself)

'Behaviour' did not demonstrate a significant main effect $F(1, 85) = 0.06, p = .938, \eta_p^2 = .000$. The interaction effect between behaviour and diagnosis was once again non-significant, $F(1, 85) = .006, p = .938, \eta_p^2 = .000$. The results, however,

indicate a significant ‘Diagnosis’ main effect $F(1, 85) = 7.64, p = .007, \eta_p^2 = .082$.

This suggests that there is a significant difference between participants’ total scores on the Social Distance Scale on the basis of diagnostic label, with Table 16 indicating that participants were more likely to want to socially distance themselves when they believe that the individual has a diagnosis of schizophrenia as opposed to a diagnosis of personality disorder. This is contrary to the predicted direction of the hypothesis.

To further explore the significant ‘Diagnosis’ main effect, additional independent samples t-tests were conducted: one for the prosocial condition and another for the antisocial condition. For the prosocial video, the difference between the schizophrenia and the personality disorder groups on the social distancing variable was found to be statistically significant $t(85) = 2.338, p = .022$, as was the difference between the two groups in the antisocial condition $t(85) = 2.427, p = .017$. This suggests that there is a statistically significant difference between the diagnostic groups in on the ‘Social Distance’ factor when they are presented with both prosocial and antisocial behaviour.

3.4.3.4 Summary of results for hypothesis three.

The results of the statistical analyses demonstrate that hypothesis three is not supported. Significant differences between the assigned diagnostic groups were not found for either the ‘Help’ or ‘Coercion’ factors.

A statistically significant difference between the diagnostic groups was found on the ‘Social Distance’ factor, with additional analysis demonstrating that this difference was significant across both the prosocial and antisocial behaviour conditions. However, this finding was in the opposite direction to that predicted in the hypothesis with the results demonstrating that participants were more likely to

consider socially distancing themselves when they viewed the label of schizophrenia than when they viewed the personality disorder label.

3.4.4 Hypothesis four: Increased negative attributions (dangerousness and controllability) and negative emotions (anger, pity and fear) will be associated with higher levels of discriminatory behaviour (coercion, social distancing and withholding help) in both the personality disorder and the schizophrenia conditions.

In order to investigate hypothesis four, the un-dichotomised data were used from the Anger, Pity and Fear variables. Not all variables were normally distributed and therefore a Spearman's rho, the non-parametric version of the Pearson's r correlation, was used to investigate the relationship between participants' attributions, emotional reactions and intended behaviours within each of the four groups (personality disorder prosocial, personality disorder antisocial, schizophrenia prosocial, and schizophrenia antisocial).

3.4.4.1 Schizophrenia prosocial group.

In relation to attributions, the Table 17 shows that statistically significant medium strength positive correlations were found between Dangerousness and Help, and Dangerousness and Social Distance. This suggests that higher attributions of dangerousness are associated with an increased desire to help. This is not consistent with the hypothesis. However, higher attributions of dangerousness are also significantly associated with an increased desire to behave in a socially distant manner towards people with a diagnosis of schizophrenia, which is not consistent with direction predicted by the hypothesis. There was also a statistically significant medium strength negative correlation between the attribution of dangerousness and

intended coercive behaviour, which does not support the hypothesis. This indicates that higher attributions of dangerousness are associated with a lower desire to behave in a coercive manner towards people with a diagnosis of schizophrenia who are behaving in a prosocial way.

In relation to emotional reactions, a statistically significant medium strength negative correlation was found between Fear and Help. This suggests that increased fear of an individual with a diagnosis of schizophrenia is associated with a lower desire to help, even when they are behaving in a prosocial manner. Once again, this finding supports the hypothesis.

Table 17

Spearman's Rho Correlation Coefficients Between Participants' Attribution, Emotional Reaction and Intended Behaviour Scores in the Schizophrenia Prosocial Group

		Intended Behaviours		
		Help	Coercion	Social Distance
Attributions	Controllability	.205	.138	-.103
	Dangerousness	.402**	-.481**	.598**
Emotional Reactions	Anger	-.370	.079	-.103
	Pity	-.034	.183	-.225
	Fear	-.438**	-.037	-.430

*p = <.05, **p = <.001

N = 41

3.4.4.2 Personality Disorder prosocial group.

Table 18

Spearman's Rho Correlation Coefficients Between Participants' Attribution, Emotional Reaction and Intended Behaviour Scores in the Personality Disorder Prosocial Group

		Intended Behaviours		
		Help	Coercion	Social Distance
Attributions	Controllability	-.224	.308*	-.167
	Dangerousness	.369*	-.433**	.639**
Emotional Reactions	Anger	.193	.114	-.032
	Pity	-.044	-.092	-.028
	Fear	.135	.087	-.090

*p = <.05, **p = <.001

N = 46

In relation to attributions, a small statistically significant correlation was found between Controllability and Coercion. This suggests that higher attributions of controllability are associated with an increased desire to behave in a coercive manner towards individuals with a personality disorder, which supports the hypothesis. A statistically significant medium strength positive correlation was found between Dangerousness and Help and a large significant positive correlation was found between Dangerousness and Social Distance. This suggests that higher attributions of dangerousness are associated with an increased desire to help, which once again, does not support the hypothesis. However, increased attributions of dangerousness are also

significantly associated with an increased desire to behave in a socially distant manner towards people with a diagnosis of personality disorder, even those who are behaving prosocially, which is consistent with the hypothesis. There was also a medium strength negative correlation between the attribution of Dangerousness and Coercion. This indicates that higher attributions of dangerousness are associated with a lower desire to behave in a coercive manner towards people with a diagnosis of personality disorder who are behaving in a prosocial manner. This, again, is not consistent with the hypothesis. The correlations in relation to dangerousness and intended behaviours therefore replicate those found in the schizophrenia group.

No significant correlations were found between participant's emotional reactions and their intended behaviours towards individuals with a personality disorder diagnosis. This element of the hypothesis is therefore not supported.

3.4.4.3 Schizophrenia antisocial group.

Table 19 demonstrates a statistically significant medium strength positive correlation was found between Dangerousness and Social Distance. This suggests that higher attributions of dangerousness are associated with an increased desire to behave in a socially distant manner towards people with a diagnosis of schizophrenia who are behaving in an antisocial manner, which is consistent with the hypothesis.

In relation to emotional reactions, statistically significant medium strength negative correlations were found between Anger and Fear, and Help. This suggests that increased feelings of anger and fear towards an individual with a diagnosis of schizophrenia is associated with a lower desire to help when they are behaving in an antisocial way. This again supports the hypothesis.

Table 19

Spearman's Rho Correlation Coefficients Between Participants' Attribution, Emotional Reaction and Intended Behaviour Scores in the Schizophrenia Antisocial Group

		Intended Behaviours		
		Help	Coercion	Social Distance
Attributions	Controllability	.066	.202	.003
	Dangerousness	-.284	-.186	.384*
Emotional Reactions	Anger	-.450**	.085	-.361
	Pity	.149	.279	-.089
	Fear	-.346*	-.202	-.094
*p = <.05, **p = <.001				N = 41

3.4.4.4 Personality Disorder antisocial group.

Table 20 indicates that a medium statistically significant correlation was found between Dangerousness and Help and also a large statistically significant large correlation was found between Dangerousness and Social Distance. This suggests that higher attributions of controllability are associated with an increased desire to help, which is not consistent with the hypothesis, but also an increased desire to socially distance from an individual with a diagnosis of personality disorder who is behaving in an antisocial way, which does support the hypothesis.

The correlations between emotional reactions and intended behaviours indicate medium strength statistically significant negative correlations between Anger, and Help and Coercion. This suggests that as feelings of anger increase, participants experience a decreased desire to help and an increased desire to socially distance themselves from an individual with a diagnosis of personality disorder who is behaving in an antisocial manner. This is similar for the medium strength negative correlation between fear and help, whereby as feelings of fear increase, the desire to help the individual depicted in the video decreases. These findings are also supportive of the hypothesis.

Table 20

Spearman's Rho Correlation Coefficients Between Participants' Attribution, Emotional Reaction and Intended Behaviour Scores in the Personality Disorder Antisocial Group

		Intended Behaviours		
		Help	Coercion	Social Distance
Attributions	Controllability	-.038	.259	.047
	Dangerousness	.402**	-.255	.600**
Emotional Reactions	Anger	-.536**	.203	-.340*
	Pity	-.145	-.050	.015
	Fear	-.399**	.133	-.226

* $p < .05$, ** $p < .001$

N = 46

3.4.4.5 Summary of results for hypothesis four.

The findings above indicate that hypothesis four is partially supported. The intended behaviour of helping revealed statistically significant correlations with the highest number of attributions and emotional reactions. Across three of the four groups, there was a medium strength positive correlation between Dangerousness and Help, suggesting that as attributions of dangerousness increased, intention to help the individual depicted in the video also increased. This is the opposite direction to that predicted by the hypothesis. Also, in three of the four groups, Fear demonstrated a moderate negative correlation with Help. This indicates that as fear of the individual increases, the intention to help decreases, which is supportive of the hypothesis. Interestingly, the emotion of anger only demonstrated a statistically significant correlation with helping behaviour when both the personality disorder and the schizophrenia groups were shown the antisocial video. This correlation was a moderate negative correlation, indicating that as anger increased, intention to help decreased, again supporting the hypothesis.

The intended behaviour of coercion yielded statistically significant correlations with both the Controllability and Dangerousness attributions, although not with any of the emotional reactions. Coercion only significantly correlated with Controllability in the personality prosocial group, suggesting that, as attributions of controllability increase, individuals are more likely to want to behave in a coercive manner. Coercion only significantly correlated with Dangerousness in the prosocial condition in both the schizophrenia and the personality disorder groups, suggesting that as attributions of dangerousness increase, again so does the desire to behave coercively. Both of these findings support the hypothesis.

Finally, the intended behaviour of Coercion revealed statistically significant correlations with the attribution of Dangerousness and the emotional reaction of Anger. Dangerousness and social distancing were significantly correlated in all four groups, indicating that as attributions of dangerousness increase so does the desire to socially distance oneself from the patient. However, interestingly the correlation coefficients were much larger in both conditions of the personality disorder groups than the schizophrenia groups. While this supports the hypothesis, it is interesting when considering that dangerousness yielded positive correlations with intention to help. The correlation between anger and social distancing was only found in the antisocial personality disorder group. This was a medium strength negative correlation, which suggests that as feelings of anger increase, the desire to socially distance reduces, which is the opposite to the direction predicted by the hypothesis.

3.5 Summary of Results

Hypothesis one investigated whether student mental health nurses held different attributions towards individuals with a diagnosis of personality disorder and those with a diagnosis of schizophrenia. Statistical analysis revealed that the magnitude of the differences between the two groups on the Perceived Dangerousness Scale and the Controllability factor of the adapted AQ-27 were not significant. Thus, this hypothesis is not supported.

Hypothesis two considered whether individuals would experience more negative emotions towards those labelled with personality disorder than those with schizophrenia. This hypothesis was also not supported as statistical analysis revealed that the strength of the association between the diagnostic group and scores on these Anger, Fear and Pity variables of the adapted AQ-27 was not significant.

Hypothesis three explored whether participants intended to behave differently towards service users labelled with personality disorder than those labelled with schizophrenia. For the Help and Coercion factors on the adapted AQ-27, analysis did not reveal any statistically significant difference between the two groups. However, a statistically significant difference was found on the social distance factor, for both the prosocial and the antisocial conditions, although this was in the opposite direction to that predicted in the hypothesis, with the results demonstrating that participants were more likely to consider socially distancing themselves when they viewed the label of schizophrenia than when they viewed the personality disorder label. Once again, this means that the findings do not support the hypothesis.

Finally, hypothesis four was partially supported. Hypothesis four focused on exploring the association between staff attributions and intended behaviours, and emotional reactions and intended behaviours. Similar patterns of correlations were found in both the personality disorder and the schizophrenia groups across both the prosocial and antisocial conditions. Across all of the groups, dangerousness was an important attribution in determining helping behaviour. However, it seemed to have a stronger association with the desire to socially distance oneself if participants believed the individual was suffering from a personality disorder than schizophrenia. Across both diagnostic groups, significant negative correlations were found with the emotions of fear and anger and intended helping behaviour, suggesting that as these negative emotions increase, desire to help decreases. Pity was the only variable of all the attributions and emotions that did not significantly correlate with any of the investigated intended behaviours.

CHAPTER FOUR: DISCUSSION

4.1 Overview of the Chapter

The chapter will begin by briefly revisiting the aims and the overview of the present study. A summary of the main findings will then be presented and consideration will be given to how these compare with previous research findings in the field. Following this, there will be a discussion of the strengths and limitations of the research. The theoretical and clinical implications of the study will be considered and suggestions for future research will be outlined. Finally, an overall conclusion will be drawn.

4.2 Summary of the Research Aims and Overview of the Study

It is well documented in the research literature that clients with a diagnosis of personality disorder tend to evoke more negative responses in professionals than those with other psychiatric diagnoses (Cleary et al., 2002). The overarching intention of this study was to explore the stigma associated with the diagnostic label of personality disorder and whether this differed from the stigma held about another mental health disorder, in this case, schizophrenia. The study aimed to investigate this by using aspects of Corrigan et al's (2003) model of public discrimination towards a person with a mental illness, which suggests that attributions of controllability and dangerousness, along with emotional reactions, influence the intended behaviours of helping, social distancing and coercion. Therefore, the aim of this study was to investigate whether there are differences in the attributions, emotional reactions and intended behaviours of student mental health nurses towards individuals with a diagnostic label of personality disorder, compared to those with a diagnostic label of schizophrenia.

It is important to explore reactions to diagnostic labels as an individual's diagnosis is one of the first pieces of information received by professionals, often before any form of contact has taken place. It could, therefore, be potentially detrimental to the care provided, if mental health professionals react negatively towards service users at the time of first meeting them, essentially on the basis of their diagnostic label, not least because research has indicated that negative attributions and emotional reactions often result in discriminatory behaviour, including social distancing and coercion (Corrigan & Watson, 2002).

The research employed an experimental mixed design. Participants were randomised into one of two groups: one group viewed the video recorded behaviour of a male whom they were told had a personality disorder, while the other viewed the same video material having been told he suffered from schizophrenia. Participants were shown two videos: one of prosocial behaviour and the other of antisocial behaviour. These were shown in a counterbalanced manner to control for order effects. After each video they completed three questionnaires to measure their attributions, emotional reactions and intended behaviours towards the individual they had viewed in the video. A correlational design was also used to assess associations between attributions, emotional reactions and intended behaviours.

4.3 Summary of Findings and their Relation to Existing Literature

The study aimed to examine four hypotheses. The first considered attributions, the second explored emotional reactions, and the third addressed intended behaviours. The fourth hypothesis was concerned with the associations between all three of these factors.

As previously acknowledged in section 1.6, whilst the literature base has recently begun to consider the utility of attribution theories in relation to specific personality disorder subtypes, in particular borderline personality disorder, there continues to be little research specifically identifying how attribution theories relate, or are applicable, to the overarching label of personality disorder. The literature review for the present study demonstrated that, although some support for the pathway models of cognitive attribution theories (i.e. Corrigan et al., 2003, Weiner, 1980; 1985; 1986; 1995) could be inferred from the findings of previous studies investigating the overarching label of personality disorder, none of the existing literature (at the time of writing) investigated these theories specifically in relation to this diagnostic label. There was also no existing literature investigating the comparison of the general personality disorder label to other mental health diagnostic labels, where these pathway models of attribution had been investigated. Difficulties therefore arise in discussing the findings of the present study in relation to previous literature, as there is very limited literature that exists in this specific field. In light of this, it should be borne in mind that some of the previous literature discussed here will be regarding studies where attitudes towards specific subtypes of personality disorder have been investigated.

4.3.1 Hypothesis one: Attributions.

The first hypothesis suggested that mental health nursing students would make more attributions of dangerousness and controllability towards an individual labelled with personality disorder than an individual labelled with schizophrenia. These two attributions were chosen because Corrigan et al's (2003) model of public discrimination towards a person with mental illness suggests that these are the two main attributions that affect emotional reactions and intended behaviours.

4.3.1.1 Dangerousness.

The 'Dangerousness' aspect of hypothesis one was not supported. Results of statistical testing indicated that the diagnostic label viewed by participants did not significantly affect their attributions of dangerousness towards the individual depicted in the videos. The absence of a significant difference between the diagnostic groups was found for each of the two behavioural presentations (simple effects) on the dangerousness variable. Furthermore, no significant interaction effect between diagnosis and behavioural presentation was found.

These findings appear to differ from the results of previous research. Newton-Howes et al. (2008) evaluated attitudes of various mental health staff towards clients currently in their care. Results suggested that, when compared to non-personality disorder clients, mental health professionals believed those with personality disorder to be more aggressive, more difficult to manage and less compliant.

If consideration is given to the findings of Newton-Howes et al. (2008) in relation to the Corrigan et al. (2003) model of stigma, it could be inferred that the perception that clients with personality disorder are more aggressive than those with other mental health diagnoses could equate to a higher attribution of dangerousness. It could also be assumed that the belief that those with personality disorder are more difficult to manage and less compliant than those with other diagnoses may also lead to discriminatory behaviours towards those with a personality disorder diagnosis, such as coercion and withholding of help.

If we consider these inferences and assumptions to be correct, it might be hypothesised that the difference in results between the study conducted by Newton-Howes et al. (2008) and the current study may be reflective of the differences in

participants combined with the differences in design. Participants in the study by Newton Howes et al. were qualified mental health staff from a variety of disciplines working in community settings. In contrast, the sample in this research consisted of student mental health nurses with a wide variety of experience, ranging from having had no clinical contact to having completed up to eleven placements across a variety of settings over three years. The methods used in each of the studies were also very different, with Newton-Howes et al. drawing on clinicians' experiences of their current clients, while the present research used videotaped vignettes of a stranger. It therefore might be suggested that the differences in findings could potentially be mediated by participants' knowledge of the individual (i.e. known client vs. stranger) and their contact with them (i.e. they will have had increased contact with a known client and observed more complexities in real-life behaviour than in short video clips). While it may be argued that the design of the present study may be a better means of assessing prejudices and attributions based on diagnostic label alone, the failure to reject the null hypothesis may also be attributable to the wider variance in terms of clinical experience among the student mental health nurses.

There may also be an effect of participants' feelings of investment in their client or role. For example, it is possible that the clinicians in the study by Newton-Howes et al. may experience a greater feeling of investment in their role and in the care of their clients due to the very nature of employment, whereas in the current study students are less likely to feel any form of investment in the care of the individual depicted in the video and may therefore have weaker attributions or feelings regarding intended behaviour. Despite these points, the fact that the elements of dangerousness and discriminatory behaviour were not specifically measured in the study by Newton-Howes et al. (2008) means that these disparities in the findings

between the present study and those of Newton-Howes et al can only remain conjectural.

In terms of dangerousness, a literature review by Sansone & Sansone (2013) indicates that the vast majority of previous studies demonstrate that mental health professionals perceive those with borderline personality disorder to be more dangerous than those with other mental health diagnoses. However, the findings from the present study are of interest in relation to a study conducted by Markham (2003). Markham explored attributions of dangerousness towards in-patients with borderline personality disorder, schizophrenia and depression. Findings from that study revealed that qualified mental health nurses perceived individuals with a diagnosis of schizophrenia or depression to be significantly less dangerous than those with borderline personality disorder, which is not supported by the findings of the present study. However, healthcare assistants made no such distinction, which is consistent with the present results. This suggests that perhaps attributions of dangerousness change with experience and, given that most of the previous research in this field has used qualified clinicians as participants (in particular nursing staff), it is perhaps unsurprising that the research base indicates that the increased negative attitudes towards clients with personality disorders are views that are held more or less globally, when in fact this may not be the case when other participant populations are used. It will, therefore, be beneficial for future research to explore whether attributions change over time and with experience.

Failure to reject the null hypothesis does not of course mean that it is true and, consequently, one cannot use negative findings from one study to support similar non-significant differences in another. It is perhaps of interest, however, that Strong (2010) found among mental health professionals working in community teams no

significant difference between staff attributions of dangerousness towards a service user labelled with borderline personality disorder and depression, and a service user labelled with depression alone. The study by Strong used case vignettes in the form of referral letters, thereby increasing their external validity. It is of interest that the current study and the study conducted by Strong used the same measure of dangerousness: the Perceived Dangerousness Scale (Angermeyer et al., 2004). Whilst a review of the psychometric properties demonstrated adequate reliability and validity for it to be deemed an appropriate measure for the current study, it may be a consideration for future studies that perhaps a more sensitive measure of dangerousness should be considered.

4.3.1.2 Controllability.

No statistically significant difference was found between the personality disorder and the schizophrenia groups on the attribution of controllability. Whilst the type of behaviour viewed was not necessarily part of the original hypothesis, the absence of a significant difference between the diagnostic groups was found for each of the two behavioural presentations (simple effects) on this variable. Moreover, no significant interaction effect between diagnosis and behavioral presentation was found. This therefore means that the ‘Controllability’ aspect of hypothesis one is also not supported.

The findings of the present study do not support those reported by Lewis and Appleby (1988) who discovered that, even when psychiatrists disagreed with an individual’s personality disorder diagnosis (i.e. believing that they had been misdiagnosed by another clinician), they held more critical attitudes towards that client, and perceived their difficulties to be more under their control. However, when

consideration is given to the measures used, the items which purport to measure controllability in the research by Lewis and Appleby relate to debts and suicidal urges. This is different from the constructs measured in the present study where the controllability items on the adapted AQ-27 refer to the individuals' 'present condition'. It is possible, therefore, that the items measuring controllability in the current research may be more ambiguous and open to wider interpretation by participants, which may result in less polarised attitudes on this factor, as indicated by the normal distribution of the scores on this variable in the present study.

The findings from the current research are also in contrast to those reported by Richman et al. (1999). Richman et al. conducted a qualitative vignette study using nursing staff from a high secure hospital, to consider constructs of mental health (without specific reference to diagnosis) and their relation to violence. Findings indicated that staff did not perceive the person who committed a violent act to be 'evil' if lodged within a psychiatric label, such as schizophrenia, because they perceived them to be less responsible for their actions/thoughts, and not to possess rationality or control. In contrast, clients depicted as possessing features of personality disorder were granted no such entitlement, but rather were labelled as 'evil', with subjects inferring they had deliberately chosen and consciously undertaken the violent acts.

Study design and measures used may be one of the reasons that Richman et al. (1999) may have produced findings that are the opposite of those reported in the present study. The adapted AQ-27 (Corrigan et al., 2003) only has three specific items that relate to attributions of controllability, whereas the results of Richman et al. were derived from a qualitative study whereby participants could be more open with their ideas and where they could be explored in more depth.

It must also be acknowledged that both of the previous studies referred to were conducted fourteen to twenty-five years ago. Since this time, there have been significant changes to legislation surrounding personality disorder diagnoses, such as the amendments to the Mental Health Act in 2007. There has also been an increase in the number of therapeutic models that provide effective techniques for working with individuals with personality disorder (Bateman & Fonagy, 2004; Linehan, 1993; Young, 1999), increased clinical guidance has been published for practitioners (NICE, 2009a; 2009b), and new policies for service provision have been developed (Department of Health, 2009). As a result, it is possible that current attributions would potentially be less extreme than those measured almost fifteen years ago.

In the present study, one possible reason for the failure to demonstrate a difference between the personality disorder and the schizophrenia group on the 'Controllability' variable could be the measure of controllability that was chosen. It is recognised that this measure demonstrated questionable internal reliability. Interestingly, the same measure was used to assess controllability by Strong (2010), who also found no significant difference between staff attributions of controllability towards a service user labelled with borderline personality disorder and depression on the one hand, and a service user labelled with depression alone when made by mental health professionals working in community teams. Once again, it is of interest that both studies used the same measure of controllability. As for dangerousness, it may be considered that similar research should be conducted using an alternative measure to determine whether any differences may arise.

4.3.2 Hypothesis two: Emotional reactions.

Hypothesis two suggested that student mental health nurses would experience more negative emotional reactions (anger, pity and fear) towards an individual labelled with personality disorder than an individual labelled with schizophrenia. These three emotions were chosen because they are suggested by Corrigan et al. (2003) to be common emotional reactions involved in the process of stigma.

4.3.2.1 Anger.

The 'Anger' aspect of hypothesis two is not supported. No statistically significant associations were found between diagnostic group and 'low' and 'high' scores on the anger variable. Additionally, statistically significant differences were also not found between the personality disorder group and the schizophrenia on the anger variable. This finding was upheld across both the prosocial and antisocial conditions, indicating low feelings of anger irrespective of the behaviour presented in the videos.

In the existing research base, it has not been possible to find studies that have specifically addressed clinicians' feelings of anger towards individuals with a diagnostic label of either schizophrenia or the general personality disorder label. Lewis and Appleby's study (1988) did report that psychiatrists felt that individuals with personality disorder were significantly more likely to annoy them than those with another mental health diagnosis. The results from the present study, however, did not reveal significant differences on this variable, with histograms demonstrating that the majority of participants in both groups demonstrated low levels of anger. There may be several possible reasons for the failure to reject the null hypothesis in the present study including a possibly greater tendency among student nurses to dissimulation of

what they may consider to be a more socially desirable response (Furnham, 1986) compared to more experienced clinicians. Again it should be considered that Lewis and Appleby's measure only contained one item to consider this construct (i.e. 'annoyance'), whereas the present study included three items, one of which specifically asked how angry the participant would feel with the individual in the video. Therefore, although it appears that the current findings do not support the findings from Lewis and Appleby's research, no firm conclusion can be drawn, as it is not clear that they are measuring the same construct.

Although the study by Strong (2010) did not have a specific hypothesis focusing on the relationship between anger and diagnostic label, additional analyses were conducted to examine this. Strong identified that community mental health staff were significantly less likely to report feeling angry towards the service user in the vignette labelled with just depression than towards the service user labelled with both depression and borderline personality disorder. It may be considered that the discrepancy between the findings in the present study and those reported by Strong could be a result of the difference in participants. Strong used a sample of qualified clinicians from a variety of disciplines, whereas the present study uses student mental health nurses, some with little or no direct clinical experience. As noted above it is possible that qualified clinicians may feel more able to honestly report feelings of anger as, working in the field, it is recognised that often clients evoke various emotions in staff and that this is a normal reaction. In contrast, students with little or no experience of working in clinical settings may feel less confident in reporting these reactions or may believe that they are not allowed to have feelings of anger, therefore making it difficult to report their feelings honestly. Further research, however, is required to investigate this possibility.

4.3.2.2 Pity.

No statistically significant difference was found between the personality disorder and the schizophrenia groups on the emotional reaction of pity. The absence of a statistically significant difference was found when comparing the diagnoses on both the prosocial and antisocial conditions (simple effects). Thus no significant differential effect in terms of feelings of pity was found between diagnostic groups, irrespective of the behaviour depicted in the video. Moreover, no significant interaction effect between diagnosis and behavioural presentation was found for this variable. This, therefore, means that the 'Pity' aspect of hypothesis two is also not supported.

Again, within the existing literature base, it has not been possible to find studies that have specifically addressed clinicians' feelings of pity towards individuals with a diagnostic label of either schizophrenia or the general personality disorder label. Lewis and Appleby (1988), however, identified that psychiatrists felt that individuals with personality disorder were significantly less likely to evoke sympathy from them than those with other mental health diagnoses. Again, it should be considered that, based on face validity, Lewis and Appleby's measure only contained one item specifically asking about 'sympathy', whereas the present study included three items, specifically asking about the participants' levels of pity, sympathy and concern for the individual in the video. Therefore, although the current findings do not provide support for those from Lewis and Appleby's research, it is conceded that the measures employed are different and it is not clear that they are measuring the same construct. In addition, as noted above, there were clear differences between the clinicians employed and their respective levels of experience.

In support of the findings by Lewis and Appleby (1988), a study by Markham and Trower (2003) demonstrated that staff reported less sympathy towards patients with a diagnosis of borderline personality disorder than those with a diagnosis of schizophrenia or depression. Once again, however, it is not entirely clear whether the measures of sympathy and pity are assessing the same construct.

It may be considered that there is a difference between the findings of the present study and the findings of Markham and Trower (2003) due to the fact that they utilised different participant populations; Markham and Trower only used qualified mental health nurses, whereas the present study used student mental health nurses, thus meaning that knowledge, experience and workplace expectations may potentially influence findings. It could also be hypothesised that this difference in findings could be mediated by recent advancements in the knowledge and understanding of the causal environmental factors of personality disorder, such as unstable childhood attachments or abuse histories. If this were true, it may mean that, in comparison to ten years ago, when the study by Markham and Trower was conducted, more pity or sympathy may be felt towards those with personality disorder on the basis that there may be greater awareness in recent years of external factors in the aetiology of personality disorder.

4.3.2.3 Fear.

The 'Fear' aspect of hypothesis two is not supported. No statistically significant associations were found between diagnostic group and 'low' and 'high' scores on the fear variable. Additionally, statistically significant differences were also not found between the means of the personality disorder and the schizophrenia groups on the fear variable. This finding was upheld across both the prosocial and antisocial

conditions, suggesting that behaviour presented in the video has no differential bearing on levels of fear.

Once again, in the existing literature base, it has not been possible to find studies that have specifically addressed clinicians' feelings of fear towards individuals with a diagnostic label of personality disorder. While there are many studies examining feelings of fear among members of the general public towards individuals with a diagnosis of schizophrenia (Corrigan, 1998; Corrigan et al., 2003), it was not possible, at the time of writing, to find any empirical studies relating to feelings of fear among mental health professionals towards individuals with schizophrenia.

It may be assumed that feelings of fear would be associated with attributions of dangerousness, i.e. increased attributions of dangerousness resulting in increased feelings of fear, and vice versa. While the present failure to find a significant difference between groups on the measure of fear was consistent with those for perceived dangerousness, it is important to acknowledge that both were negative findings which may in turn be due to a number of limitations of the study including the sensitivity of the measures employed, clinical experience of the participants and the study design itself.

Failure to reject the null hypothesis does not of course mean that it is true and, consequently, one cannot use negative findings from one study to support similar non-significant differences in another. However, again it is of note that Strong (2010), who also failed to find a significant difference between feelings of fear towards the service user in the vignette labelled with just depression than towards the service user labelled with both depression and borderline personality disorder. Once again, it should be noted that both Strong and the current study used the same measure of fear and it is

possible that the negative findings of both studies may be in part at least an artefact of the measure employed, which resulted in significant polarisation of scores. It may therefore be beneficial for future studies to consider a different measure to determine whether this may prove more sensitive in testing this hypothesis.

4.3.3. Hypothesis three: Intended behaviour.

Hypothesis three proposed that mental health nursing students would be less willing to help and more likely to coerce and socially distance themselves from an individual labelled with personality disorder than an individual labelled with schizophrenia. These intended behaviours were chosen for the present study because they are features of both Weiner's causal attribution theory (Weiner, 1995) and Corrigan et al.'s model of discrimination (Corrigan et al., 2003).

4.3.3.1 Helping behaviour.

The 'Help' aspect of hypothesis three was not supported. No statistically significant associations were found between diagnostic group and 'low' and 'high' scores on the help variable. Additionally, statistically significant differences were also not found between the personality disorder group and the schizophrenia on the help variable. This finding was upheld across both the prosocial and antisocial conditions, indicating no significant differential effect of diagnostic label in terms of desire to help or withhold help, irrespective of the behaviour presented in the videos.

This is in contrast to findings from the previous literature. Lewis and Appleby (1988) demonstrated that psychiatrists were significantly more rejecting of individuals labelled with personality disorder than those with other mental health diagnoses, endorsing attitudes such as the individual being undeserving of NHS care, that they

should be discharged from outpatient care and that they are unlikely to comply with or complete treatment. Although Lewis and Appleby were not specifically assessing helping behaviours or the withholding of help, the fact that these negative attitudes were endorsed more for those with personality disorder than those with other diagnoses is suggestive of the fact that psychiatrists would be less likely to offer help to those with a diagnosis of personality disorder. The findings from the study by Lewis and Appleby are also supported by Stalker et al. (2005) who report that, when service providers were interviewed, they could not provide examples of good practice that they had observed in their services towards individuals with a diagnosis of personality disorder.

Given that helping behaviour is not specifically addressed by the above two studies, it can only be inferred that the diagnostic label of personality disorder leads to clinicians intending to offer less helping behaviour, or that less helping behaviour in accordance with 'good practice' is displayed. However, when specifically considering the borderline subtype of personality disorder, both Strong (2010) and Forsythe (2007) demonstrated that staff were significantly more likely to intend to offer help to individuals labelled with depression than those labelled with borderline personality disorder. These findings are not consistent with the findings from the current study. It may be considered that this could be due to the difference in the mental health diagnosis used i.e. the current study uses schizophrenia, whereas Strong and Forsythe both use depression, although this does not appear to have affected other variables such as controllability. At the time of writing, it was not possible to find literature specifically comparing the intention to exhibit helping behaviour, or indeed to withhold helping behaviour, towards individuals with personality disorder and individuals with schizophrenia. It was also not possible to find literature comparing

this behaviour towards schizophrenia and depression. In light of this, specifically measuring the intention to help or to withhold help for individuals with these diagnoses may be a topic to be addressed in future research.

4.3.3.2 Coercion.

No statistically significant difference was found between personality disorder group and the schizophrenia group on the intended behaviour of coercion. There was also an absence of a significant difference between the diagnostic groups for each of the two behavioural presentations (simple effects) on this variable. In addition, no significant interaction effect between diagnosis and behavioural presentation was found. This therefore means that the ‘Coercion’ aspect of hypothesis three is also not supported.

It is of interest that Bowers et al. (2007) found that psychiatric nurses with a more negative attitude towards patients with a personality disorder favoured management strategies that involved coercion, such as stricter rules and a greater use of containment methods, such as seclusion. No significant difference was found in the present study among the sample of student nurses in terms of their essentially positive response to both personality disorder and schizophrenia, irrespective of their depicted behaviour, which suggests that in both groups non-coercive management strategies would be favoured.

4.3.3.3. Social distance.

The ‘Social Distance’ aspect of hypothesis three is supported. A statistically significant diagnosis main effect was found between participants’ scores on the Social Distance Scale when they believed that the individual in the video had a diagnosis of

personality disorder than when they believed he had a diagnosis of schizophrenia. It is possible that this may have implications for the nurses in terms of the establishment or/and maintenance of an effective therapeutic relationship with patients with a personality disorder, compared to patients with schizophrenia, although further research would be required to determine whether this is so.

This is consistent with findings from Lewis and Appleby's (1988) study where, when psychiatrists believed that the individual in the vignette had a diagnosis of personality disorder, they were significantly more likely to endorse the statement 'would not like to have in one's clinic', than if they believed that the individual had another mental health diagnosis. The finding from the current study is also consistent with studies where the borderline personality subtype has been contrasted to depression (Markham, 2003; Strong, 2010).

4.3.4 Hypothesis four: Relationships between attributions, emotions and intended behaviours.

Hypothesis four was partially supported. Hypothesis four used bivariate correlations to explore possible associations between staff attributions and intended behaviours, and staff emotions and intended behaviours, within each of the four subgroups (personality disorder prosocial, personality disorder antisocial, schizophrenia prosocial and schizophrenia antisocial). Similar patterns of correlations were found in both the personality disorder and the schizophrenia groups across both the prosocial and antisocial conditions.

Across all groups, dangerousness demonstrated significant positive correlations ($r = .39 - .63$) with the desire to socially distance oneself, however the strength of the correlation was stronger if participants believed the individual were

suffering from a personality disorder rather than schizophrenia. This suggests that, in the current study, when attributions of dangerousness increase, so does an individual's desire to socially distance oneself, regardless of diagnosis. This supports this element of hypothesis four and is consistent with the model proposed by Corrigan et al. (2003).

Interestingly, across all groups (with the exception of the schizophrenia antisocial group), dangerousness was significantly associated with an increased desire to help the individual. This is the opposite finding to the prediction made in the hypothesis and to the model proposed by Corrigan et al. (2003). This, therefore, does not seem to fit with the fact that dangerousness is positively correlated with social distance, as it appears that, when a patient is perceived as dangerous, student mental health nurses would both want to distance themselves and help, which is likely to require contact with the patient. Upon searching the existing literature, it has not been possible to find any other studies where there has been a similar finding, with most literature reporting the opposite. It may be considered that the finding in the current study could be due to a limitation of the sample used. In view of the fact that the sample comprised individuals training for a career in a profession that is predominantly known for helping, it is possible that student mental health nurses would have found it very difficult to acknowledge the fact that they may desire to withhold help from an individual. It may also be that the measure of social distancing comprises factors relating to social elements of relationships, whereas helping can take many forms, for example over the telephone, making referrals to appropriate agencies, etc., many of which do not require close physical contact with the patient. This finding could also be as a result of a limitation in the analysis and therefore be a Type I error due to the number of bivariate correlations used.

Dangerousness also significantly negatively correlated with coercion in the two prosocial groups ($r = -.48$ and $-.43$ for the schizophrenia and prosocial groups respectively), but not in the two antisocial groups. It is of interest that this finding was apparent only for the prosocial condition. It could possibly be suggested that it may be perceived that greater levels of coercion are required when a patient is behaving antisocially as it may be anticipated they would require greater levels of persuasion to agree to treatment and that treatment may need to be given more forcefully, whereas if patients are behaving prosocially, it may be considered that they have less need for treatment or would be more amenable to it and therefore less coercive behaviour would be required. This is potentially an issue to be investigated further in future research.

It is also of interest that controllability did not significantly correlate with any of the intended behaviours, across any of the groups ($r = .00 - .26$). This does not support the research hypothesis or Corrigan et al.'s proposed pathway model of stigma. The only exception to this is the small-medium strength positive correlation between controllability and coercion in the personality disorder prosocial subgroup ($r = .31$). It is accepted, however, that, due to the large number of correlations conducted (20 correlations were conducted), that this could be significant at the .05 level just by chance alone.

In terms of emotional reactions, pity was the only variable that did not significantly correlate with any of the investigated intended behaviours. This is not consistent with the hypothesis. However, across both diagnostic groups, significant negative correlations were found with the emotions of fear and anger and intended helping behaviour. This suggests that increased emotions of anger or fear decrease participants' desire to help that individual. This is consistent with the hypothesis and

with the model proposed by Corrigan et al. (2003). This is also interesting, as it may be expected that fear would be significantly correlated with dangerousness, although this was not found.

Finally, it is of note that, between the personality disorder group and the schizophrenia group, there are no marked differences in the associations that have been found. This raises the possibility that those aspects for which significant associations have been detected may be applicable across most mental health diagnoses and that Corrigan et al.'s (2003) proposed model may hold more global validity rather than being diagnosis specific.

It should be acknowledged that the above pattern of results and the general lack of support for the hypotheses may also be attributable to limitations of the measures and aspects of the study's design, which will now be discussed in full below.

4.4 Strengths and Limitations of the Research

4.4.1 Measures.

It is acknowledged that there were some limitations to the measures used within the current study. Strengths and limitations of the measures used to explore attributions, emotional responses, and intended behaviours will be discussed in turn below. This section will then go on to discuss some of the overarching issues spanning all of the measures, including the sole use of self-report and the use of Likert scales in attitudinal studies.

4.4.1.1 Attribution measures.

4.4.1.1.1 Dangerousness.

In the present study, dangerousness was measured using the Perceived Dangerousness Scale (Angermeyer et al., 2004). The original measure consisted of a dangerousness scale and a dependency scale, although only the dangerousness scale was used in this study. As a stand-alone scale, the dangerousness scale had yielded adequate internal consistency with both lay populations ($\alpha=.88$; Angermeyer et al., 2004) and a variety of qualified mental health professionals ($\alpha = .76$; Strong, 2010). In this study, this measure had a Cronbach's alpha of .85 among the personality disorder group and .90 in the schizophrenia group, reinforcing previous reports of its reliability and its appropriateness for this study and this sample.

However, a closer examination of the individual items of the scale reveals that only one item specifically asks about dangerousness, and another item asks whether the individual is perceived to be aggressive, which people are likely to associate with a perception of someone being physically dangerous. The other items are less obviously related to dangerousness and, in particular, physical dangerousness. For example, participants are asked to rate to what extent the descriptions 'strange' and 'lacks self-control' relate to the individual in the video. It may be suggested that these items would be more relevant to Weiner's (1980; 1985; 1986; 1995) model where the attribution of dangerousness is replaced with the attribution of stability.

It is also of note that, although the Perceived Dangerousness Scale is intended to assess participants' perceptions of the physical risk of dangerousness from the individual depicted in the video, it does not assess other types of dangerousness. For example, Woolaston and Hixenbaugh (2008) recognised that professionals also make

attributions about individuals with borderline personality disorder being dangerous to one's career or profession, i.e. a higher risk of making complaints or litigation. It is unclear whether such an inference would be made by the student nurses or whether, even if they did, this would be of significant concern to them as students on the basis that, as supervisees, they would not have full clinical responsibility for their work. On the other hand, however, it could be argued that they may feel more anxious about 'professionally dangerous' clients who could potentially hamper their career prospects and development with vexatious complaints or litigation.

4.4.1.1.2 Controllability

In this study, controllability was measured by three items on the adapted AQ-27 (Corrigan et al., 2003). However, it was found to have a Cronbach's alpha of only 0.56 in the personality disorder group and .48 in the schizophrenia group. Cronbach (1951) recognised that the more items a scale has, the more likely it is to have a larger alpha value. In light of this, the inter-item correlation for the scale was calculated, which has been recognised as an alternative method of calculating internal validity when scales consist of only a small number of items. Clark and Watson (1995) suggest that an inter-item correlation of .15 and .50 is acceptable for social science research. For the present study, the variable with the lowest alpha coefficient ($\alpha = .48$) was the controllability factor in schizophrenia group. When calculated, the inter-item correlation for this scale was .21 which suggests that it is sufficiently reliable for the current study. Despite this, it is acknowledged that other scales in this study with only three items have reached the appropriate alpha level of .7, suggesting that the internal reliability of the controllability measure may not be entirely sound. In light of this, future research should consider using an alternative method of controllability.

4.4.1.2 Emotional response measures.

In the current study, all three emotional responses (anger, pity and fear) were measured using the adapted AQ-27 (Corrigan et al., 2003). The scale for each emotion consisted of three items. Despite the fact that they are only very short scales, each one has good face validity, with one item on each asking directly about the emotion addressed. For example, an item on the ‘anger’ scale explicitly asks ‘How angry would you feel at Tom’, and the other two items ask about related emotions or concepts (e.g. irritation and aggravation). The anger and fear scales both returned Cronbach’s alpha values of above .7 for both the personality disorder and schizophrenia groups. This suggests that they were both adequately reliable for the present study. However, despite the apparently good face validity of the scale, the pity items only returned values of $\alpha = .55$ and $\alpha = .48$ for the personality disorder group and schizophrenia group respectively. Again, based on the justification given by Clark and Watson (1995), this scale was found to have an inter-item correlation that was acceptable for the present study. However, it is once again acknowledged that other scales in this study with only three items have reached the appropriate alpha level of .7, suggesting that the internal reliability of the controllability measure may not be entirely sound. Once again, it is suggested that future research should consider using an alternative method of pity.

4.4.1.3 Measures of intended behaviour.

4.4.1.3.1 Social Distance.

The social distance factor was measured by the Social Distancing Scale (Link et al., 1987; Hay, 2007). Whilst this measure had been previously used with qualified mental health staff (Strong, 2010) and with lay people (Hay, 2007), it had never

previously been used with unqualified staff or students. Despite this, it demonstrated excellent internal consistency in the current study, returning Cronbach's alpha values of .91 in each of the personality disorder and schizophrenia groups.

This measure appears to have good face validity, i.e. all of the items appear to be measuring social distancing. On reflection, however, it is unclear how well all of these items measure the types of distancing behaviours that are likely to be employed by student mental health nurses towards clients under their care. Whilst the measure clearly assesses distancing of a social nature (as it is supposed to) - for example 'would you be friends with a person like Tom?'-, it does not measure perhaps more subtle distancing that may occur in mental health settings. For example, the scale does not measure whether students would like to work with clients similar to the one depicted in the video, or, in terms of more informal aspects of care which are more likely to occur in inpatient settings, asking whether they would play a board game with a patient similar to the one depicted in the video, or whether they would eat their lunch with them. Perhaps some aspects of this more subtle distancing within mental health settings would overlap with the intended behaviour measured by the 'help' factor. Equally, it is likely that such distancing behaviours would be specific to the settings within which individuals were working.

Additionally, it may be suggested that some of the items on the Social Distancing Scale might have been difficult for participants to answer, due to an awareness of staff-patient boundaries, such as 'I would be friends with a person like Tom'. In light of these issues, it may be considered that using an alternative measure of distancing may be more appropriate in future research.

4.4.1.3.2 Help and coercion.

To measure the intended behaviours of help and coercion, these two factors from the adapted AQ-27 (Corrigan et al., 2003) were used. Once again, both of these scales comprised only three items. The coercion scale achieved adequate Cronbach's alpha values of .79 and .78 for the personality disorder group and the schizophrenia group respectively. In addition, it also demonstrated good face validity. These factors suggest that it was a valid and appropriate measure to use for the current study.

However, the validity and utility of the scale addressing intended helping behaviour may be more questionable. In terms of internal validity, it demonstrated $\alpha = .70$ for the personality disorder group and can therefore be deemed adequately reliable. However, for the schizophrenia group it only returned a Cronbach's alpha value of .54, suggesting that, when it is viewed alongside the schizophrenia video, all three items on the scale do not measure the same construct to an adequate degree. Previously, this measure has only been used once with qualified mental health staff where the 'help' scale returned an alpha value of .63 (Strong, 2010). While in both of these studies the inter-item correlation has been considered adequate (between .15 and .50 as stipulated by Clark & Watson in their 1995 paper), it should still be taken into account in future research with staff that an alternative measure may be more reliable.

It is also of note that, in this study, the distribution of data on the 'help' variable was severely skewed toward the top end of the range, with higher scores indicating a greater desire to help. It may be considered that asking mental health nursing students about their intended helping behaviour is misleading because, by the very nature of desiring to undertake mental health nursing as a career, they are declaring an interest in helping people with both personality disorder and

schizophrenia. It is also a consideration that, during training, placements are often very short and, therefore, students may not realise and recognise all of the complexities associated with working with these client groups. As previously discussed, experience may contribute to a bias in individuals' attitudes towards these diagnostic labels, e.g. associating an individual's diagnosis with previous experience of 'revolving door' clients. In light of this, it may be asked whether any measure of intended helping behaviour would be adequately reliable, due to socially desirable responding (Orne, 1962), or representative of actual behaviour.

4.4.1.4 Overarching strengths and limitations of measures chosen.

The strengths and limitations of each individual measure have been discussed. However, there are some additional considerations with regards to the appropriateness and utility of these measures for the present study, namely the use of semantic differential scales for attitudinal research and the sole use of self-report.

4.4.1.4.1 Use of semantic differential scales.

The adapted AQ-27 consists of 18 semantic differential scales. In the present study the AQ-27 was used to measure controllability, anger, pity, fear, intended helping behaviour and intended coercion. The fact that many of these variables were highly skewed is likely to be due, in part, to the subjective nature of the meaning of the increments on a semantic differential scale. Dow, Ledwith, Fraser & Bhagat (1975) found similar polarisation of responses on this type of scale, albeit with a different population sample. This skew was particularly notable on the feelings of anger and fear and the intended behaviour of helping. The severity of this skew required the data to be dichotomised for the purposes of analysis. This results, however, in losing some of the information that arises from the original data and

requires the use of less powerful statistical analyses. In light of this, it may be beneficial for future research to consider whether the use of semantic differential scales is the most appropriate way of measuring attitudes.

4.4.1.4.2 Use of self-report.

It is of note that all of the measures used in the current study are self-report in nature. This obviously comes with limitations, in particular socially desirable responding, as previously discussed. It is particularly important to consider the use of self-report measures in this study in relation to participants' intended behaviour.

Previous research by Young (2008) reported that intended behaviour of staff towards patients diagnosed with a personality disorder accounted for only 19% of the variance of actual helping behaviours. It may therefore be considered that, whilst there appears to be no significant difference between the degree of help that student mental health nurses intend to offer clients with personality disorder and clients with schizophrenia, we cannot be certain how this would translate to their actual behaviour in practice.

In light of this, the present study might have been strengthened by including a measure of actual behaviour that was free from the biases of self-report. However, it was not within the scope of the current design or methodology to do so. This would be an important consideration for any future research in the area.

4.4.2 Design and Methodology.

4.4.2.1 Design.

The study used a mixed design. The between groups factor was diagnosis. The strength of the between groups element is that it reduces the likelihood that participants will identify the true aim of the study (i.e. that it was to assess differences

in attributions, emotional reactions, and intended behaviours towards the labels of personality disorder and schizophrenia). Therefore, to an extent, this reduces some possibility of socially desirable responding.

On the other hand, a weakness of a between groups element to the design is that there is a higher rate of unsystematic variance between the groups, i.e. that the differences between the groups are influenced by something other than the diagnostic label. This was not actively protected for in the current study as the randomisation was based on the order of people visiting the study website as opposed to attempting to match salient characteristics, such as age, gender or experience, in each group.

The repeated measures aspect of the design was the showing of the videos. The order in which participants saw the videos was counterbalanced in order to counteract any order effects, as discussed in section 3.3.2. There are both strengths and limitations of the repeated measures aspect of this study. Showing each group the prosocial and the antisocial video could be considered a strength as it allows the study to consider different types of behaviours that might be exhibited by an individual, therefore potentially increasing ecological validity, i.e. if it were only based on one type of behaviour it may be considered that it would be a biased evaluation of attributions, emotions and intended behaviours.

However, this repeated measures aspect may also be a weakness of the study as it could be perceived to be limited in ecological validity. This is because it entails seeing the same scenario, with the same individual, but displaying two very different behaviours in a relatively short space of time. This is unlikely to be a realistic representation of a student nurse's first meeting of a patient. It also means that the same questionnaires were repeated twice in quick succession. This may result in

tiredness or boredom on the part of the participants. It may also have resulted in the participants believing that the purpose of the study was to consider differences in their responses to different types of behaviour which, in itself, may lead to different types of socially desirable responding which could potentially bias results.

Finally, a correlational design was used to explore the associations between attributions, emotions and intended behaviours. Although correlational designs are appropriate and useful for exploring these associations, they are limited as they do not allow us to infer causality. This therefore makes it impossible to identify the direction of the relationship and to make judgements about which factor is influencing the other.

4.4.2.2 Use of video.

The use of video in this study is novel. Previous studies in this area are all based on written vignettes or require participants to draw on their own previous experiences. The use of videos in the current study can be considered a strength of the research as, videotaped vignettes allow more of the ambiguities surrounding everyday life and individual behaviour to be captured than written vignettes (Loman & Larkin, 1976). Furthermore, they also impose more interpretational demands on participants, thus being more representative of real life situations and are more easily retained and recalled than written vignettes (Kinicki et al., 1995).

However, the limitations described in the discussion of the repeated measures aspect of the design continue to apply. Specifically the fact that viewing two videos depicting the same scenario, with the same individual, but displaying two very different behaviours in a relatively short space of time is likely to be quite improbable in real life. Equally, the content of the video may have not provided the participants

with enough information to answer some of the questions. For example, on the controllability scale, participants are asked about the individual's 'present condition'. In a written vignette, participants would be likely to be given some basic information about the difficulties that the patient experiences. However, no such information was given in the video; rather participants only saw the conversation and the diagnostic label. In future studies, particularly those that use video, further consideration should be given to the information provided about the patient.

4.4.2.3 Diagnostic labels.

A strength of this study is that it is the first to specifically consider the utility of a specific attribution theory in relation to the general label of personality disorder. The comparison between the diagnostic groups of personality disorder and schizophrenia on the different aspects of this pathway model of stigma is also novel.

Schizophrenia was chosen as the control variable because, in the existing literature, it is one of the two most widely used diagnoses for comparison with personality disorder (the other being depression). This is because, individuals with these diagnoses are also often thought of as 'difficult' patients (Koekkoek, et al., 2006). Schizophrenia was chosen as it is considered a more severe and enduring mental health diagnosis than depression. It was, therefore, thought that the inclusion of schizophrenia as the control diagnosis would allow for greater ease of comparison with previous research findings.

However, it should be considered that there are important differences between the two diagnoses, not least, that schizophrenia has a well researched, strong evidence base for effective treatment (NICE, 2009). This contrasts with personality disorder for which the evidence base for effective treatment has only recently begun to emerge.

Another important difference is that medication is often seen as a frontline treatment for schizophrenia (NICE, 2009), whereas it is used much less frequently to manage symptoms of personality disorder. Although these differences did not appear to have a significant effect on the attributions, emotions and intended behaviours of student mental health nurses, it may be that the effect would be more marked in a sample of qualified nursing staff who are likely to have more knowledge and experience of the causes and treatments for each of these diagnoses.

4.4.2.4 Sample.

The use of student mental health nurses in this research may be considered a strength. This is because there are very few studies that consider the attitudes and attributions made by student mental health nurses. By expanding the literature in relation to this participant group, it allows for comparisons to be drawn with previous studies which have used qualified staff, which will enable consideration to be given as to how these attitudes are mediated by the factors of exposure, experience, knowledge and interest. However, a limitation of the study is that a robust measure of participant experience was not used, therefore meaning that it is not possible to accurately assess the effect of experience on attributions and intended behaviours. This is a significant limitation of the study as familiarity and experience are cited by Corrigan et al. (2003) as an influencing factor. Whilst a basic measure of experience (number of years into training) was completed and Chi-square analysis did not reveal any significant difference in experience between the groups, this measure is not robust enough to determine whether there were any actual differences in experience between the groups. It also does not take into account the type of experiences had. This is important as learning theories would suggest that past experiences would be likely to influence the development of attributions and future decisions about intended

behaviour. Future studies might consider using a more in-depth measure of experience in order to address this limitation.

4.4.3 Analysis.

It is also helpful to consider the strengths and weaknesses of this study in terms of the statistical analysis of the data. As previously reported, several of the variables were severely skewed. This meant that, for hypotheses one to three, multiple ANOVAs were conducted in addition to Pearson's chi-squares and Mann-Whitney U analyses, whereas if the data had been normally distributed, multiple analyses of variance (MANOVAs) could have potentially been utilised, although interpretations of these findings would have been much more complex. The increased number of individual analyses therefore increased the chances of Type I error (i.e. concluding that there is statistically significant effect where one does not exist). In order to address this issue, follow up t-tests were conducted for each significant statistical finding. Whilst it is acknowledged that other post-hoc testing approaches could have been used, for example Bonferroni approaches, it is considered that the small number of t-tests conducted would not have had an effect on multiplicity. This limitation with regards to Type I error should also be held in mind when considering the results for hypothesis four.

This study also used a large number of Spearman's rho correlations, once again increasing Type I error, whereby the presence of a significant correlation is erroneously concluded. Again, whilst Bonferroni approaches could have been used in order to correct for multiplicity, this would result in the alpha levels becoming very small (i.e. Field (2012) suggest that for a significant correlation to be found it would

require an alpha level of .0001). This would then be likely to result in a Type II error where there is a failure to reject a false null hypothesis.

Another limitation arising from the severely skewed nature of the data is the fact that, in order to conduct any form of meaningful analysis on the items that did not meet the assumptions of normality, dichotomisation was required. It is assumed that this is also the reason that data were dichotomised in the study conducted by Purves and Sands (2009). This dichotomisation results in two main issues: firstly, the fact that information is lost during the dichotomisation process; secondly, the fact that participants were unaware that scores would be dichotomised in this way also presents a difficulty. For example, the data for the anger variable was dichotomised in such a way that scores of four and below represented a 'low' score, and scores of four and above represented a 'high' score. However, due to the semantic differential nature of the scale, each increment on the scale is subjective and so, for example, someone endorsing a score of five on an item may not have perceived this to be a high score. Thus, in the dichotomisation process, the meaning of individual scores may have been altered. The fact that this cut-off has had to be implemented may also not be ideal for use with a semantic-differential scale, as it becomes unclear what is truly meant by low and high scores at the time of completion of the questionnaire. Also, it is likely that different results would have been found if this cut-off was placed elsewhere, for example if the anger variable had been dichotomised at five as opposed to four. This should be considered as a potential concern for future studies in this area where semantic differential scales are being considered.

In terms of additional analysis, it may have been interesting to repeat the analysis in relation to experience to determine whether attributions, emotions and intended behaviour change over the course of training. This would have allowed a

comparison with a study by Markham (2003), where it appeared that individuals tended to become more negative about service users with personality disorder over time. Whilst it would have been possible to do this analysis with the current sample, it is unlikely that adequate power would have been achieved. This is something that could be addressed in future research.

4.5 Theoretical Implications

4.5.1 Attribution theories.

In an attempt to determine whether there were significant differences, and thus discrimination, in the reactions of mental health nursing students towards individuals with a diagnosis of personality disorder compared to those with a diagnosis of schizophrenia, the present study utilised aspects of Corrigan et al's (2003) pathway model of public discrimination towards a person with a mental illness (which also has many similarities to Weiner's (1980; 1985; 1986; 1995) model). Corrigan et al.'s model suggests that attributions of controllability and dangerousness, along with emotional reactions, influence the intended behaviours of helping, social distancing and coercion. Given that few statistically significant findings were present, the theoretical implications that can be derived from the present study in relation to attribution theories are limited.

Despite no significant differences being found on the attributions or emotional responses, a significant difference between the groups was found on the social distancing factor. Whilst it is acknowledged that this may be a chance finding as a result of many separate analyses, this could also be interpreted to suggest that these attributions and emotional reactions cannot accurately identify whether or not an individual will wish to socially distance themselves.

One of the main differences between Weiner's model (1980; 1985; 1986; 1995) and the model proposed by Corrigan et al. (2003) is the attribution of dangerousness. Weiner's model suggested that the two main attributions that influence intended behaviour were controllability and stability, whereas in Corrigan et al.'s model the attributions referred to are controllability and dangerousness. Correlational analysis demonstrated significant associations between the attribution of dangerousness and all three intended behaviours across all groups. This suggests that attributions of dangerousness form an important part of the pathway models.

It is of note that, whilst the Corrigan et al.(2003) model has support as an attribution model to explain reactions of the general public towards those with mental health diagnoses, there has only been one other study investigating it in mental health staff (Strong, 2010). Strong also did not report results to suggest that the model is a reliable method of explaining reactions of mental health staff to those with mental health diagnoses. It therefore cannot be ruled out that mental health staff simply do not form attributions about individuals with mental health difficulties in the same way as the general public.

4.5.3 Theoretical perspectives not explored.

Whilst the focus of the present study was mostly on the cognitive aspect of the development of attributional biases and whether this influences intended behaviour, it is important to remember that behavioural/learning theories will also influence the way in which attributional biases are formed and maintained. These theories suggest that behaviour occurs as a result of learning through interaction with the environment via the processes of conditioning and reinforcement and/or punishment. Based on these theories it would therefore be reasonable to suggest that the participant's

previous experiences with individual with personality disorder or schizophrenia would influence the development of their cognitive attributions, their emotional reactions and thus their intended behaviours. For example, if an individual had frequently felt frightened by the behaviour of a patient, it would be likely that they would generalise this feeling of fear to other patients with the same diagnosis or similar presentation. In this case, socially distancing oneself, for example, would act as a negative reinforcer as it would reduce feelings of fear, therefore meaning that the behaviour of social distancing is also generalised.

Literature indicates that when working with people with personality disorder, professionals tend to recognise that they experience a lack of positive reinforcement, as positive changes can be small or unnoticeable (Pfohl et al., 1999, as cited in Murphy & McVey, 2010). This lack of positive reinforcement therefore means that positive behaviour changes towards this client group may be more difficult to introduce or sustain. Rather, the negative behaviours often exhibited by this client group are much more noticeable, such as self-harm, aggression or relapses. In terms of behavioural theory, this would be likely to act as punishment as it is a negative stimulus and is therefore likely to increase behaviours that provide negative reinforcement, such as social distancing and coercion.

Although Corrigan et al. (2003) suggested that greater knowledge and familiarity with a mental health diagnosis is likely to produce more positive attributions, they did not explicitly state how or why this would be the case or whether this would hold true for those who have had negative experiences or who are familiar with the more negative aspects of a diagnosis. The lack of information gathered from participants in the current study with regards to their experiences, knowledge and familiarity with the two diagnoses being studied is a significant limitation as it does

not allow for findings relating to the cognitive aspects of attribution theory to be evaluated in light of previous experiences and the effect of learning theories.

4.5.4 Signalling events.

The vast majority of research investigating attitudes and stigma has been based on Weiner's theory of attribution (1980; 1985; 1986; 1995). These studies traditionally use challenging behaviour as a signalling event to trigger the pathway between attributions, emotions and intended behaviours, for example challenging behaviour (Lucas et al., 2009) or deliberate self-harm (Crawford et al., 2003). The model proposed by Corrigan et al. (2003) argues that signalling events are much wider than just behaviour, and can include factors such as symptoms or diagnostic labels. In light of this, the present study utilised both behaviour and diagnostic label as signalling factors, which is likely to be representative of the first time a clinician has contact with a patient.

Findings from this study demonstrated that diagnostic label combined with behaviour of the patient failed to show any significant impact on the attributions, emotional reactions and intended behaviours of student mental health nurses. It may be argued that, when viewing the videos in the current research, participants are not required to make attributional judgements. Weiner (1986) would argue that this is because making causal attributional judgements all of the time would be unnecessary, time consuming and tiring, and that we only tend to make causal attributions when we need to understand something. If Weiner's argument is true, then the hypothetical situation presented to participants in the current study does not require any action from them or put them in any danger, which may explain the lack of expected attributional judgements of controllability or dangerousness. It therefore may be

considered for future studies that the signalling event should have greater ecological validity.

4.5.5 Aspects of attribution theory that were not explored.

The model proposed by Corrigan et al. (2003) argues that familiarity and knowledge about mental illness mediate personal responsibility and dangerousness attributions in the general public. This is supported by previous research by Strong (2010), who reported that higher knowledge levels were associated with staff indicating higher intentions to help and lower intentions to coerce service users with borderline personality disorder. However, in the present study, the concepts of knowledge and familiarity were not addressed.

Another aspect of the pathway model that was not explored in the present study was personal responsibility beliefs. The importance of personal responsibility beliefs are highlighted by both Weiner (1980; 1985; 1986; 1995) and Corrigan et al. (2003) as mediating the path between attributions, emotion and behaviour. This is particularly important in relation to attributions of controllability, because a person may be seen to be in control of their behaviour, but not to be responsible (for example, if acting in self-defence). Although both Corrigan et al. and Weiner recognised that controllability does not have to be mediated by personal responsibility beliefs to lead to helping or discriminatory behaviours, it is argued that it is personal responsibility beliefs that are important to leading to negative emotions rather than the attribution itself. However, in three of the four groups, fear significantly correlated with helping behaviour, and, in both of the groups viewing the antisocial video, anger also correlated with helping behaviour. It would be beneficial for future research to consider the association between personal responsibility beliefs, emotions and

intended behaviours to determine whether it is, in fact, the attributions themselves that lead to intended behaviour, or whether it is the personal responsibility beliefs.

4.5.6 Theoretical conclusions.

The current study failed to find a significant association between emotional reactions and intended behaviours, whereas the dangerousness attribution was associated with intended behaviours only. Findings from this study also demonstrated that anger is significantly associated with helping behaviour, whereas pity or fear was not consistently associated with any of the intended behaviours. Whilst it is possible that Corrigan et al.'s model (2003) may be of limited utility when thinking about the intended behaviours of mental health nursing students towards individuals with mental health diagnoses at the point of their first contact, it is recognised that there are a number of factors which may have influenced the negative findings. It is once again important, once again, to highlight that not all aspects of Corrigan et al.'s model (2003) were explored in this research, namely personal responsibility beliefs and knowledge.

4.6 Clinical Implications.

Whilst acknowledging the methodological strengths and weaknesses of this study, some important clinical implications can be identified.

4.6.1 Overall attitudes.

Firstly, the evidence from the present study did not support the hypothesis that the label of personality disorder would lead student mental health nurses to make more attributions of controllability and dangerousness, or experience more negative emotions, towards patients than does the label of schizophrenia. Additionally, the

results from the present study failed to demonstrate significant differences between the personality disorder group and the schizophrenia group on the intended behaviours of coercion or helping. The only significant difference found between the two groups was on the social distancing factor. However, this was in the opposite direction to that predicted, indicating that greater social distance was desired from those with schizophrenia than personality disorder. However, this result should be interpreted with caution for reasons previously explained.

These findings would appear to suggest more positive attitudes towards individuals with a diagnosis of personality disorder than much of the previous literature. It is possible that this may reflect a change in attitudes as a result of greater knowledge and understanding of personality disorder, something that was not investigated by this study. If this is true, it provides support for national incentives, such as the Knowledge and Understanding Framework training (Department of Health, 2007), and demonstrates the importance of staff having appropriate knowledge and feeling skilled to work with individuals with a given diagnosis.

It may also be reflective of a difference in participants to previous research, as the majority of previous studies have used qualified staff and/or unqualified staff employed in mental health settings, as opposed to students. Once again, if this is in fact the case, this is positive as it indicates that, at the beginning of their career, student nurses are unlikely to hold strongly negative attitudes towards particular client groups. It is possible, perhaps that any negative attitudes based on diagnostic status may develop over time and, therefore having this information, will provide a good basis for future research to investigate the factors that influence the development of these attitudes and ways in which to prevent them. However, in order to be confident

that either of the above reasons for the differences in findings is true, future research should explore this further.

4.6.2 The role of emotions.

Feelings of pity did not significantly correlate with any of the intended behaviours. However, the present study demonstrated that the emotion of anger was significantly associated with intended helping behaviour when antisocial behaviour was viewed, and in three of the four groups, fear also significantly correlated with intended helping behaviour. The fact that both diagnostic label and behaviour were used as signalling events suggests that these emotions of fear and anger, albeit low levels of these emotions, can be experienced towards patients at the first time of meeting them.

The fact that these emotions are associated with student mental health nurses wanting to offer less help is potentially important information for clinical settings. If placement staff and mentors/supervisors are aware of this, they may be in a better position to offer increased supervision, training or support to students, rather than offering post hoc support once a student has voiced these emotions or their difficulties with patients. This will be beneficial for students, as it may potentially assist in the prevention of burnout and sickness absence. It would also be beneficial for patients in their care, as this will be less likely to result in feelings of rejection and assist in the development of a more stable therapeutic relationship. Further research may wish to explore what effective strategies might be used in order to mediate these emotions during supervision and training.

4.7 Future Research

4.7.1 Theoretical

The results of the current study indicate that the attribution of dangerousness is significantly associated with helping behaviour, coercion and social distance. They also demonstrate that the emotions of fear and anger are significantly associated with intended helping behaviour. There has been no previous research exploring the attributions, emotions and intended behaviours of student mental health nurses towards either personality disorder or schizophrenia. In light of this, it is important that similar research is conducted in the future to determine the reliability of the findings from the present study. It will also be important for future research to consider what might be underlying these attributions and emotional reactions and the factors that might mediate or enhance them.

It is of note that it was not within the scope of the current study to explore all aspects of Corrigan et al.'s model (2003), and in particular the role of knowledge and familiarity of mental health labels and the development and impact of personal responsibility beliefs. In light of this, the current study cannot state with any certainty whether the model can be reliably applied to explain reactions of student mental health nurses towards those with mental health diagnoses. It would be beneficial for future research to examine all aspects of the model and to utilise a design where the pathway structure of the model can be reliably investigated in this population. In addition, it would also be of interest to explore other attributional models in a similar way in order to allow for comparisons between the models to be drawn, specifically between Weiner's model (1980; 1985; 1986; 1995) and the model proposed by Corrigan et al. (2003).

As previously described, the present study used both diagnostic label and type of behaviour as signalling events. This is likely to be representative of the first meeting between a student mental health nurse and the patient. Future research could also consider a range of signalling events, as it may be that different models are more applicable when an individual is exposed to different cues, for example, behaviour, diagnostic label, information about symptoms, etc, some of which they may only be exposed to in practice after a time of knowing the patient.

4.7.2 Methodological

Whilst the measures used in this study were deemed appropriate, they were not without limitations, such as scales comprising small numbers of items, some scales demonstrating low internal validity, the use of semantic differential scales and the sole use of self-report. It may be beneficial for future studies to consider the use of other measures. This would allow comparisons to be drawn to determine whether the findings in the present study are truly representative, or whether they are a product of the specific measures chosen.

Future studies may also want to include follow-up measures of actual behaviour. This would allow for the calculation of how much of the variance of actual behaviour can be explained by intended behaviour, which would be useful knowledge in clinical practice. Ideally this measure would be informant report, as it is likely that socially desirable responding may confound participants' disclosure of their actual behaviour.

Finally, it will be important for future research to address some of the limitations of the design used in the current study. Whilst the novel use of video and the combination of signalling events is considered a strength of the present research, it

also raised concerns about ecological validity. Based on the argument by Weiner (1986), as previously discussed, it is possible that attributions of dangerousness and controllability were not formed in the same way as they would be in real-life situations. Future studies may wish to address this, although the balance between ecological validity and internal reliability is difficult to strike in attributional research.

4.8 Conclusion

This study used videos depicting prosocial and antisocial behaviour to compare the attributions, emotional reactions and intended behaviours of student mental health nurses towards individuals with a diagnostic label of personality disorder and individuals with a diagnostic label of schizophrenia. In addition to this, it also investigated the possible relationships between staff attributions, emotions and intended behaviours.

Previous research has indicated that mental health clinicians tend to feel more negatively towards service users with personality disorder than with other psychiatric diagnoses. The current study did not support these previous research findings as it did not find significant differences between the attributions made by student mental health nurses, their emotional reactions or the intended behaviours of help or coercion towards individuals with a diagnostic label of personality disorder or a label of schizophrenia. A significant difference was detected on only one factor – social distancing – and this was not in the direction predicted, i.e. those who viewed the label of schizophrenia desired greater social distance from the individual depicted in the video, than those who viewed the label of personality disorder.

There may be many reasons for the discrepancies between the findings of the current study and the existing literature base. These include the marked increase in the

number of effective evidence-based strategies for working with those with personality disorder since previous research was conducted, an increase in governmental initiatives to expand the knowledge and understanding of clinicians with regards to this diagnosis, and the use of an unqualified sample of students. Additionally, it is also acknowledged that the difference in findings could potentially have been a result of methodological limitations, such as sample, design, measures and analysis. The comparison between the findings from the present study and those reported in previous research raised some important questions and considerations for future research. It is suggested that future research addresses some of these limitations by assessing knowledge as a mediating factor of attributions, emotions and intended behaviour, utilising wider staff groups and improving on the measures used in this study.

In addition to the findings described above, the present study also investigated the associations between attributions, emotional reactions and intended behaviours. In terms of attributions, no significant associations were found consistently across the groups between controllability and the three intended behaviours (helping, coercion and social distancing). It was found that dangerousness was associated with the desire to socially distance oneself across all of the four groups. It was also demonstrated a significant negative association with intended coercive behaviour in the two prosocial groups. This is supportive of Corrigan et al.'s model (2003) which indicates that attributions of dangerousness are important in determining intended behaviour. Interestingly, increased attributions of dangerousness were also significantly associated with an increased desire to help. This was an unexpected finding but may be explained by the limitations of using a student sample, as previously described. It

is suggested that future research should consider using a wider range of clinicians in order to investigate this further.

Finally, in terms of emotional reactions, pity was the only variable that did not significantly correlate with any of the investigated intended behaviours. This is not consistent with Corrigan et al's model (2003). However, across both diagnostic groups, significant negative correlations were found with the emotions of fear and anger and intended helping behaviour. This suggests that increased emotions of anger or fear decrease participants' desire to help that individual. This is consistent with the model proposed by Corrigan et al. (2003). This is also interesting as it would be expected that fear would be significantly correlated with dangerousness. Such a hypothesised relationship, however, was not found from the data. If supported by additional research, this would suggest important clinical implications in terms of support and supervision provided to student mental health nurses. Once again, these findings should be interpreted in light of the limitations of the current study, and in particular the effect of multiplicity increasing the chance of Type I errors. Further research should seek to address this by altering the design and method of statistical analysis.

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APPENDIX A: Information and Consent Sheet

Research Title: An investigation into the interactions between student mental health nurses and service users

I would like to invite you to take part in a research study. Before you decide whether you would like to take part, it is important that you understand why the research is being done and what it would involve for you. Please take the time to read the following information carefully and talk to others about the study if you wish.

Part 1 tells you about the purpose of the study and what it would involve for you.

Part 2 gives you more detailed information about the conduct of the study.

PART 1

What is the purpose of this study?

This research aims to explore the perceptions of students who may potentially be involved in providing mental health care in the future towards particular client groups. Information about these perceptions can help us to think about how training about these client groups might be provided in the future. It may also help us to think about how clients might experience care by health professionals.

Why have I been invited to take part?

You have been invited to take part because you are on an undergraduate mental health nursing course.

Do I have to take part?

No. Participation is entirely voluntary. The information contained here will allow you to make an informed decision about whether you would like to participate. If you do decide to take part, you are free to withdraw at any time, without needing to give a reason and without penalty. All data you provide will remain anonymous.

What will happen to me if I decide to take part?

You will need to check the box at the bottom of the page to confirm that you consent to take part. Participation is entirely anonymous. Firstly, you will be asked to provide some demographic information. You will not be able to be personally identified from the

information that you provide. You will then be asked to watch some short video clips and complete several questionnaires based your reactions to the person in the videos. Participation will take approximately 20 minutes. If you would like to be entered into the prize draw for taking part or would like a summary of the final write up, you will be asked to enter an email address.

What are the possible benefits of taking part?

I cannot promise the study will benefit you personally but the information we get might help to improve understanding of particular staff-client interactions and may help to inform wider training packages. You will have the option of entering a prize draw upon completion of the questionnaires.

What are the possible disadvantages or risks of taking part?

It is unlikely that participation in this study will cause you any distress. However, some of the questions may raise concerns about a client or patient that you are currently or have previously worked with, either in a work setting or on a placement. If concerns regarding a client or patient arise, you are encouraged to liaise with your mentor/course tutor or you can contact the researcher directly. If you feel personally distressed as a result of completion of this study, please contact the researcher directly or, if you are in the UK, any of the helpline numbers provided at the end of this sheet.

What will happen to my information if I choose to take part?

All of the data collected will be anonymous. If you choose to enter an email address in order to take part in the prize draw or to receive a summary of the write up, this will be stored separately from your questionnaire data so that anonymity of your questionnaire responses is upheld. After the study is completed, the data will continue to be stored on an encrypted memory stick and kept in a locked filing cabinet at the University of East Anglia.

PART 2

What if something goes wrong?

If you have any concerns about any aspects of this study, you should speak to either the Principal Researcher, Laura Magness, or the Educational Research Supervisor, Dr. Mike Dow. If you remain unhappy with the response and wish to make a formal complaint, please

contact the Head of Department. Contact details for all individuals are detailed at the end of this page.

Will my taking part be kept confidential?

Yes. All data will be anonymous and kept strictly confidential. If you choose to enter your email address to take part in the prize draw or receive a summary of the write up, this will be stored separately to preserve the anonymity of your questionnaire responses.

What will happen to the results of the study?

The results will also be written up to fulfill the thesis component of the Doctorate in Clinical Psychology at the University of East Anglia. A summary of the findings will also be produced and circulated to those who have stated that they would like a copy. No personally identifiable information will be included.

Who is organising and funding the research?

This research has been developed as part of the course requirements of the principal researcher's Doctoral Course in Clinical Psychology at the University of East Anglia. Any costs associated with the study will be absorbed by the budget given by the University of East Anglia.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee. This is to protect your safety, rights, wellbeing, and dignity. This study has been reviewed and given a favourable opinion by University of East Anglia FMH ethics committee.

Contact for further information

If you have any questions or wish to speak to me about this study for any reason, please contact me on the details below:

Principal Researcher: Laura Magness

Email: l.magness@uea.ac.uk

Tel: 01603 591258

Educational Supervisor: Dr Mike Dow

Email: mikedowuea@btinternet.com

Head of School: Prof. David Crossman

Email: D.Crossman@uea.ac.uk

Tel: 01603 593971

Helpline Details:

Samaritans: 08457 909090 (24 hours)

Support Line: 01708 765200

Please tick if you have read the information provided and agree to take part in this study

APPENDIX B: Letters of Ethical Approval and Approval of Amendments

Faculty of Medicine and Health Sciences Research Ethics Committee



Laura Magness
Doctorate Programme in Clinical Psychology
Elizabeth Fry Building
University of East Anglia
Norwich
NR4 7TJ

Research & Enterprise Services
West Office (Science Building)
University of East Anglia
Norwich Research Park
Norwich, NR4 7TJ

Telephone: +44 (0) 1603 591566
Email: fmh.ethics@uea.ac.uk

Web: www.uea.ac.uk/researchandenterprise

16th January 2013

Dear Laura,

Project title: Labelling people as having personality disorder: effect upon nursing staff attributions and intended behaviours. Reference: 2012/2013-17

The amendments to your above proposal have been considered by the Chair of the Faculty Research Ethics Committee and we can confirm that your proposal has been approved.

Please could you ensure that any further amendments to either the protocol or documents submitted are notified to us in advance and also that any adverse events which occur during your project are reported to the Committee. Please could you also arrange to send us a report once your project is completed.

The Committee would like to wish you good luck with your project.

Yours sincerely,

A handwritten signature in blue ink that appears to read 'P. Cole'.

PP Yvonne Kirkham
Project Officer

Faculty of Medicine and Health Sciences Research Ethics Committee



Laura Magness
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Email: fmh.ethics@uea.ac.uk

Web: www.uea.ac.uk/researchandenterprise

15th July 2013

Dear Laura,

Project title: Labelling people as having personality disorder: Effects upon the attributions and intended behaviours of future mental health care professionals Reference: 2012/2013-17

Thank you for your e-mail dated 12/07/13 notifying us of the amendments you would like to make to your above proposal. These have been considered by the Chair of the Faculty Research Ethics Committee and we can now confirm that your amendments have been approved.

Please can you ensure that any further amendments to either the protocol or documents submitted are notified to us in advance, and also that any adverse events which occur during your project are reported to the Committee.

Please can you also arrange to send us a report once your project is completed.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Yvonne Kirkham', is written over a faint, illegible typed name.

pp
Yvonne Kirkham
Project Officer

APPENDIX C: Video ScriptsProsocial script

J: Hello?

N: Hi, Is that Tom?

J: Yes, speaking.

N: Oh hi Tom, its Nicola calling from the community team.

J: Oh hi Nicola, how are you?

N: I'm very well thank you, how are things going with you at the moment?

J: Yeh, not too bad thanks.

N: Tom, I was just calling to let you know that I need to rearrange our appointment for tomorrow for a different day. I'm sorry its such short notice.

J: Oh that's a shame, not to worry though. When would you like to rearrange it for?

N: How about next Monday at 1pm?

J: Yes, I'll check but I think that should be fine with me.

N: Great. thanks Tom, I really appreciate your flexibility.

J: Ok. Hope you have a lovely weekend and I'll see you on Monday.

N: Thanks, you too. See you then. Bye

J: Thanks for calling Nicola. Bye

Antisocial Script

J: Hello?

N: Hi, Is that Tom?

J: Yeh, whos that?

N: Oh hi Tom, its Nicola calling from the community team.

J: Oh. What do you want?

N: How are things going with you at the moment Tom?

J: Same as usual – I'm fine.

N: Tom, I was just calling to let you know that I need to rearrange our appointment for tomorrow for a different day. I'm sorry its such short notice.

J: I've had enough of this. You lot do this to me every fucking time, don't you?

N: I'm sorry Tom. But I would like to see you and could come on Monday at 1?

J: So I've got to sit and wait for you all bloody morning?

N: Sorry that's the next available appointment I have.

J: I've got a good mind to complain about this shit service. Fine, see you then.

N: I apologise again. See you then. Bye.

J: Yeh whatever. Bye.

APPENDIX D: Adapted Version of Section One of The Knowledge Questionnaire

1. Are you

- Male
- Female

2. In what age group are you?

- 18-21 years
- 22-25 years
- 26-29 years
- 30-39 years
- 40-49 years
- 59 years or more

3. What year of study are you currently in?

- 1st Year
- 2nd Year
- 3rd Year
- Other (specify below)

Other Year

4. How many placements have you completed during your course?

5. What type of Mental Health Setting is your current placement in?

- Community Mental Health Team
- Crisis Team
- Acute Inpatient Ward
- Low Secure Inpatient Ward
- Drug and Alcohol Service
- Medium Secure Inpatient Ward
- High Secure Inpatient Ward
- Assertive Outreach Team
- IAPT/Wellbeing
- Other (please specify below)

6. Do you have any other relevant Mental Health work experience? (Prior to or during your course)

- Yes
- No

If yes, was this work experience...

- Full Time
- Part Time (specify hours below)
- Other (specify below)

What type of Mental Health Setting was your most recent experience in?

- Community Mental Health Team
- Crisis Team
- Acute Inpatient Ward
- Low Secure Inpatient Ward
- Drug and Alcohol Service
- Medium Secure Inpatient Ward
- High Secure Inpatient Ward
- Assertive Outreach Team
- IAPT/Wellbeing
- Other (please specify below)

What was your job role?

Was this in...

- NHS
- Private
- Charity

How long did you work in this employment?

- Less than one year
- 1-2 years
- 3-5 years
- 6-10 years

- 11-15 years
- 16-20 years
- More than 20 years (please specify number of years)

7. Do you hold any other qualifications that are relevant to Mental Health care? (e.g. diploma, NVQ, etc)

8. Have you undertaken any other courses (either as CPD or via employment) that are of relevance to Mental Health Care? (e.g. Personality disorder awareness, self harm/suicide training, drug and alcohol awareness, etc)

APPENDIX E: Adapted Attribution Questionnaire-27

Please answer each of the following questions about the person you saw in the videos (Tom). Circle the number of the best answer to each question.

1. I would feel aggravated by Tom.

1 2 3 4 5 6 7 8 9

Not at all

Very much

2. Tom would terrify me.

1 2 3 4 5 6 7 8 9

Not at all

Very much

3. How angry would you feel at Tom?

1 2 3 4 5 6 7 8 9

Not at all

Very much

4. If I were in charge of Tom's treatment, I would require him to take medication.

1 2 3 4 5 6 7 8 9

Not at all

Very much

5. I would be willing to talk to Tom about his problems.

1 2 3 4 5 6 7 8 9

Not at all

Very much

6. I would feel pity for Tom.

1 2 3 4 5 6 7 8 9

None at all

Very much

7. I would think that it was Tom's own fault that he is in his present condition.

1 2 3 4 5 6 7 8 9

No, not at all

Yes, absolutely so

8. How controllable, do you think, is the cause of Tom's present condition?

1 2 3 4 5 6 7 8 9

Not at all

completely under
personal control

9. How irritated would you feel by Tom?

1 2 3 4 5 6 7 8 9

Not at all

Very much

10. How much do you agree that Tom should be treated by a psychiatrist, even if he does not want to?

1 2 3 4 5 6 7 8 9

Not at all

Very much

11. How scared of Tom would you feel?

1 2 3 4 5 6 7 8 9

Not at all

Very much

12. How likely is it that you would help Tom?

1 2 3 4 5 6 7 8 9

Definitely wouldn't help

Definitely would
help

13. How certain would you feel that you would help Tom?

1 2 3 4 5 6 7 8 9

Not at all certain

Absolutely certain

14. How much sympathy would you feel for Tom?

1 2 3 4 5 6 7 8 9

None at all

Very much

15. How responsible, do you think, is Tom for his present condition?

1 2 3 4 5 6 7 8 9

Not at all responsible

Very much responsible

16. I would feel aggravated by Tom.

1 2 3 4 5 6 7 8 9

Not at all

Very much

17. If I were in charge of Tom's treatment, I would expect him to comply with all my recommendations.

1 2 3 4 5 6 7 8 9

Not at all

Very much

18. How much concern would you feel for Tom?

1 2 3 4 5 6 7 8 9

None at all

Very much

APPENDIX F: Perceived Dangerousness Scale

To what extent do you think the following descriptions apply to Tom?

	Definitely True	Somewhat True	Neutral	Somewhat Untrue	Definitely Untrue
Aggressive					
Lacks Self Control					
Dangerous					
Unpredictable					
Frightening					
Strange					

APPENDIX G: Adapted Social Distance Scale

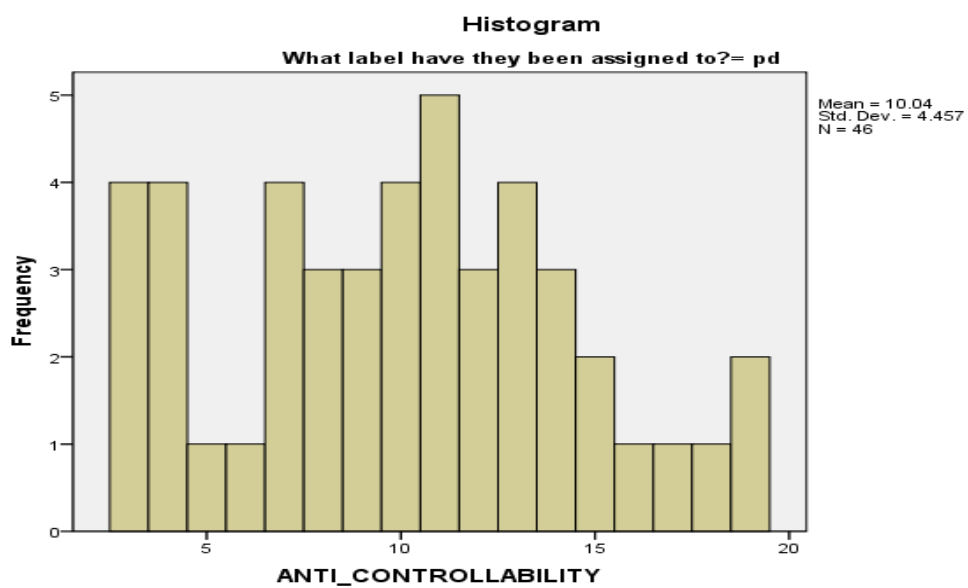
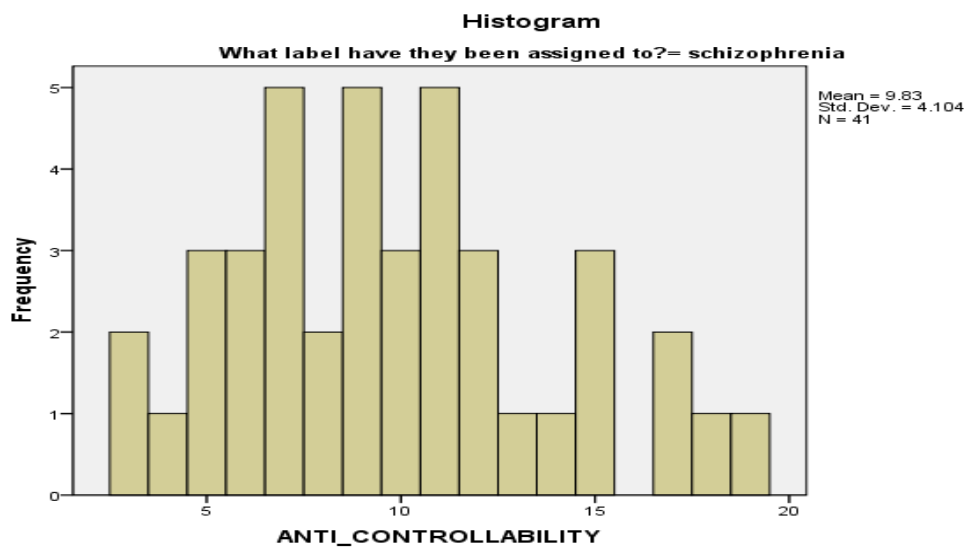
To what extent do you think the following descriptions apply to Tom?

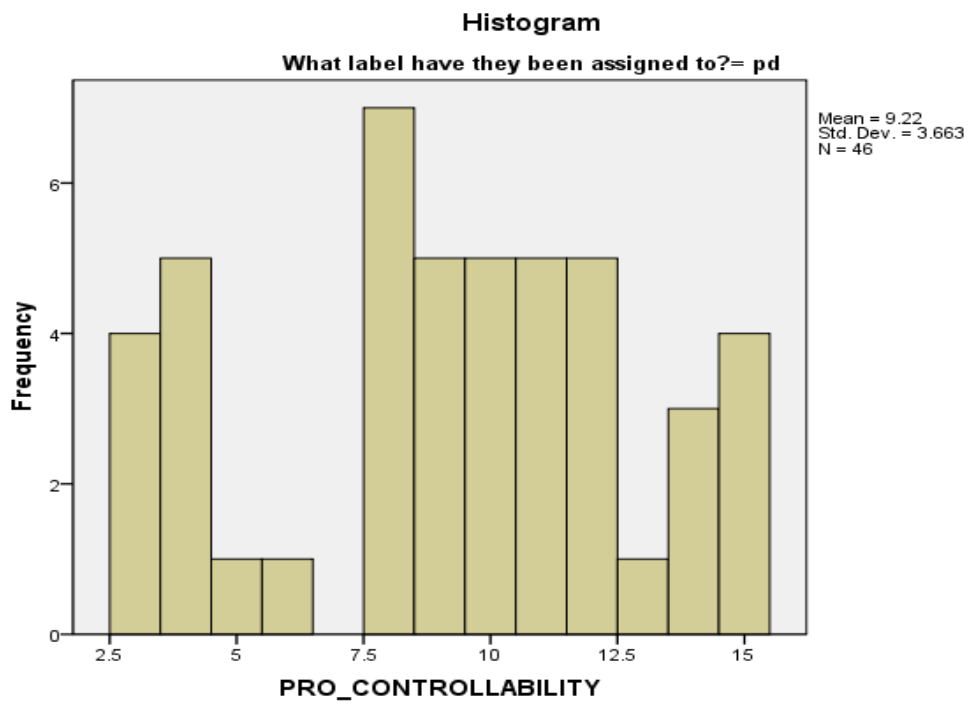
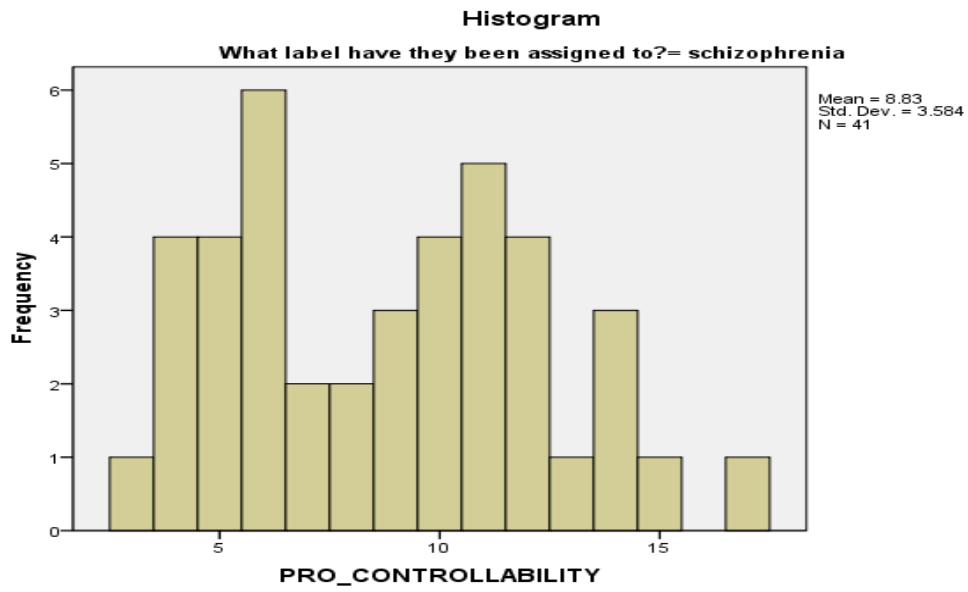
	Definitely not willing	Not willing	Neutral	Willing	Definitely Willing
Would you be willing to start work with a person like Tom?					
Would you like to move next door to a person like Tom?					
Would you make friends with a person like Tom?					
Would you rent a room to a person like Tom?					
Would you recommend a person like Tom for a job?					
Would you like your child to marry a person like Tom?					
Would you trust a person like Tom to take care of your child?					

APPENDIX H: A Sample of Normal Histograms

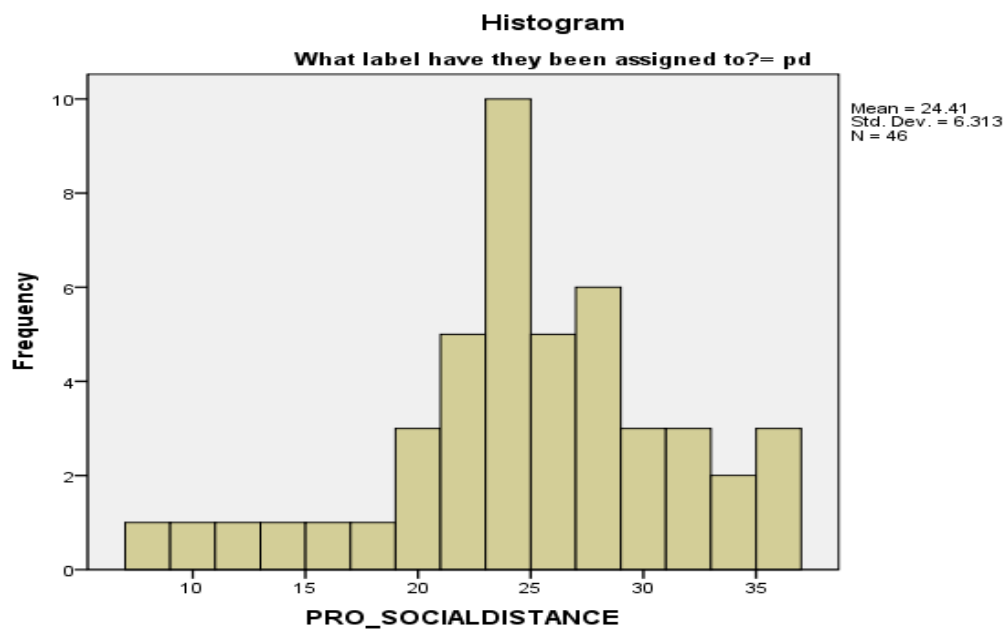
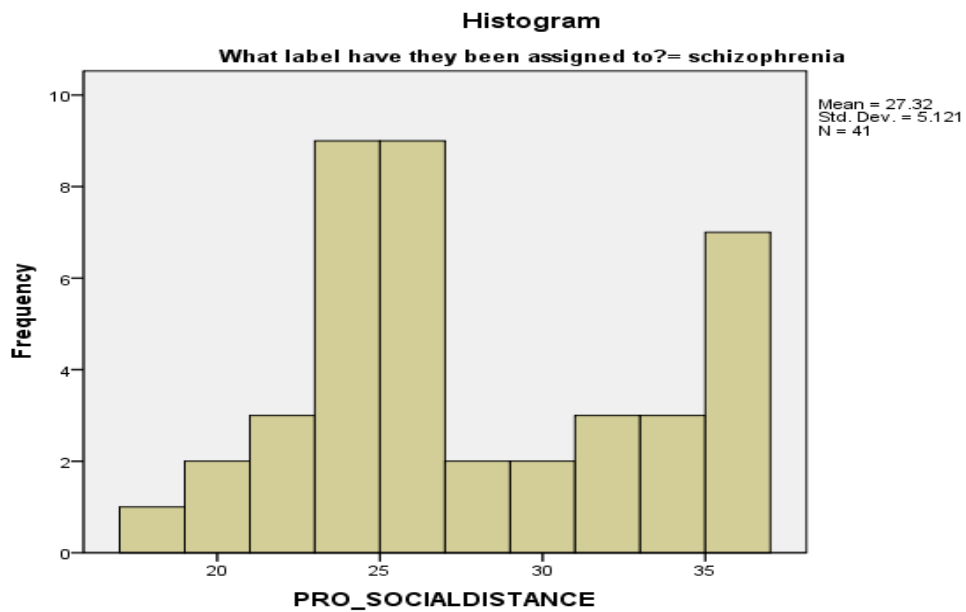
This is a sample of the histograms that were used to assess the distribution of data. All histograms and Wald statistics are available on request.

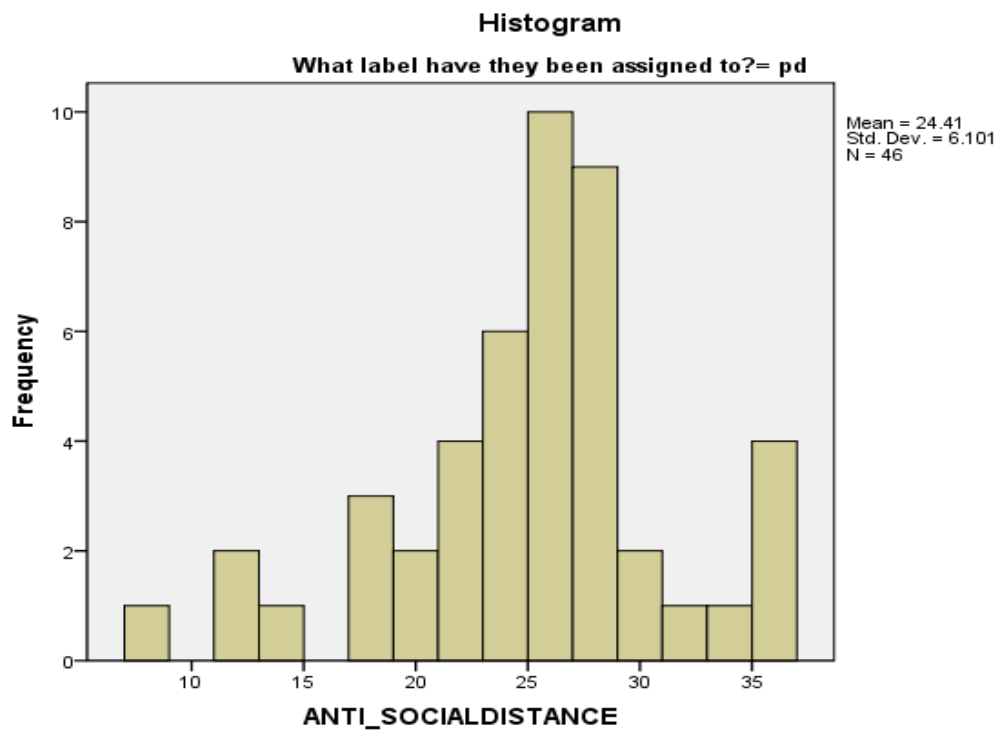
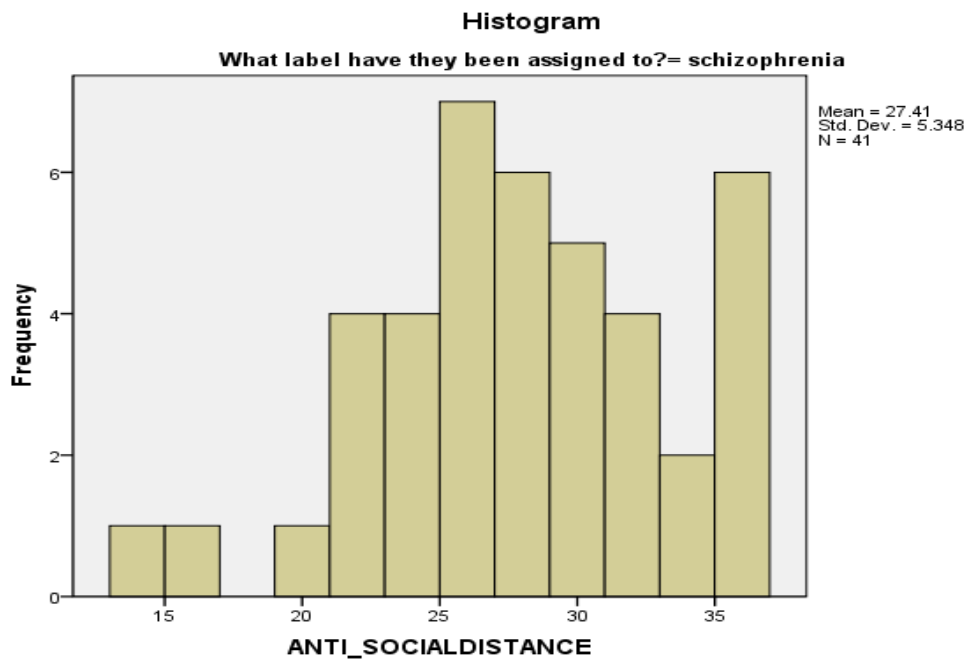
Histograms for the data on the 'Controllability' variable for each of the four groups.





Histograms for the data on the 'Social Distance' variable for each of the four groups.

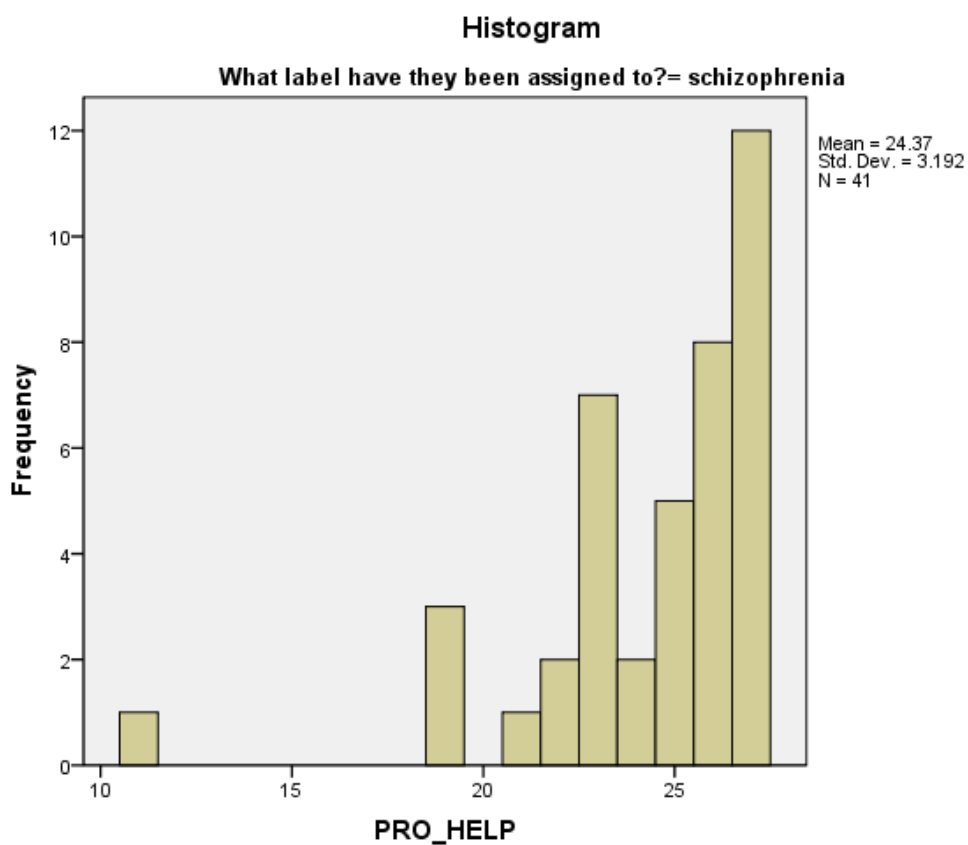




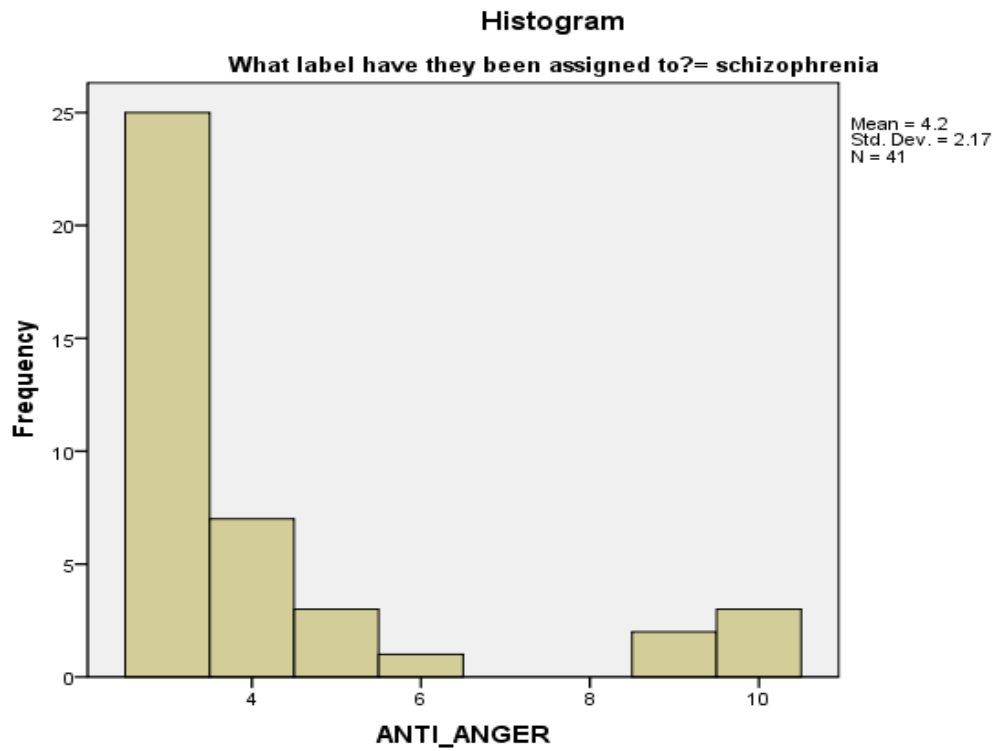
APPENDIX I: A Sample of Histograms for the 'Help', 'Anger' and 'Fear' variables

This is a sample of the histograms that were used to assess the distribution of data. All histograms and Wald statistics are available on request.

Histogram for the Schizophrenia Prosocial group on the 'Help' variable



Histogram for the Schizophrenia Antisocial group on the 'Anger' variable



Histogram for the Personality Disorder Antisocial group on the 'Fear' variable

