Mad or bad?
The role of staff attributions in dual diagnosis.

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Abstract

Research shows a high prevalence of comorbid mental health and substance use disorders, a condition known as dual diagnosis. Dual diagnoses can create significant challenges for the individuals who suffer them, the community and society in which they live, and for helping professions. National and international research shows there are significant barriers to effective treatment for dually diagnosed clients, and New Zealand research has found barriers in three categories – systemic, clinical and attitudinal (Todd, Sellman & Robertson, 2002). The current study is focused on attitudinal barriers, and used a questionnaire developed from Weiner’s (1995) theory of social conduct to compare mental health clinician’s attributions towards vignettes depicting clients with a mental illness alone, dual diagnosis or a substance use disorder alone. The resulting attributions were analysed to see if responses to the vignettes differed, and to see if attributional responses influenced judgement regarding resource allocation to clients. Results indicated that more negative attributions were made towards the individuals depicted in the dual diagnosis and substance use disorder vignettes, and support was found for the attribution affective stage of Weiner’s Theory of Social Conduct.
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# Table of Contents

Abstract ........................................................................................................ ii
Acknowledgments ...................................................................................... iii
Table of Contents ....................................................................................... iv
List of Figures ............................................................................................. v
Introduction .................................................................................................. 1
  Dual Diagnosis ......................................................................................... 1
  Attribution Theory ................................................................................. 11
  Weiner’s Theory of Social Conduct ....................................................... 15
Method ......................................................................................................... 28
  Participants ............................................................................................. 28
  Measures ............................................................................................... 30
  Procedure ............................................................................................... 32
Results .......................................................................................................... 33
  Demographic Variables ........................................................................... 33
  Within Group Between Condition Comparisons .................................. 33
  Correlational Analysis .......................................................................... 39
Discussion .................................................................................................... 46
Limitations ................................................................................................... 55
Recommendations ....................................................................................... 56
References .................................................................................................... 58
Appendices ................................................................................................... 67
List of Table and Figures

Figure 1. Attributional affect help model 16

Table 1. Years of Experience in Mental Health Work 29

Table 2. Years of Drug & Alcohol Experience 29

Table 3. Hours of Drug & Alcohol Training 30

Table 4. Descriptive Statistics for Attributional Responses to Vignettes 34

Figure 2. Mean responses for between condition Likert responses. 34

Table 5. Analysis of Variance for Within Group Between Condition Responses. 35

Table 6. Mental Illness Vignette – Between Variable Correlations 40

Figure 3. Significant correlations between attributions within condition: Mental illness 41

Table 7. Dual Diagnosis Vignette – Between Variable Correlations 42

Figure 4. Significant correlations between attributions within condition: Dual diagnosis 43

Table 8. Substance Use Disorder Vignette–Between Variable Correlations 44

Figure 5. Significant correlations between attributions within condition: Substance Use Disorder 45
Dual Diagnosis

Introduction

Research shows high actuarial levels of individuals with dual diagnosis - co-morbid mental health and substance use disorders (Mueser, Noordsy, Drake, & Fox, 2003; Todd, Sellman, & Robertson, 1998). These dual conditions can create significant challenges for the individuals who experience them, for the community and society in which they live, and for the helping professions who work with them (Todd et al., 1998; Drake, Essock, Shaner, Carey, Minkoff, Kola et al., 2001). Individuals with dual diagnosis frequently require assistance from treatment services, yet adequate service provision for this population can be the exception rather than the norm (Davis, 2003). Research has identified many barriers to care for this clinical population (Todd, Sellman & Robertson, 2002). The current study aims to look at one of these identified barriers – clinician attitudes.

Definition

This study will use the term ‘dual diagnosis’ to refer to the co-occurrence of mental health and substance use disorders, in which all diagnosable conditions meet the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition-Treatment Revision (DSM-IV-TR) criteria for these conditions (American Psychiatric Association, 2000).

Prevalence of Dual Diagnosis

Large American epidemiological studies, including The National Comorbidity Study (Kessler, McGonagle, & Zhao, 1996); National Household Survey on Drug Abuse (Substance Abuse and Mental Health Services Administration (SAMHSA), 1999); and The Epidemiologic Catchment Area Survey (ECA) (De Lima, Lorea, & Carpena, 2002); have found dual diagnosis rates varying between 25
and 80 percent (Todd et al., 2002). The variances in prevalence rates found by different studies occur due to differences in definitions, methodologies, and populations studied. No large epidemiological dual diagnosis prevalence studies have been conducted in Aotearoa New Zealand to date, but studies investigating specific populations have found rates similar to international ones (Todd et al., 2002).

International research suggests that the prevalence of dual diagnosis is rising, and that the age of those experiencing dual diagnosis is lowering (Davis, 2003). National research suggests that Maori are over-represented within those seeking treatment for both mental health and substance use disorders, indicating it is also likely that Maori are overrepresented in the dual diagnosis population (Todd et al., 2002).

**The Importance of Dual Diagnosis**

Clients experiencing dual diagnosis have been found to have more complex clinical presentations, to require services for a wider range of problems, for a longer period of time, with poorer outcomes, than non dual diagnosis clients (Drake, 2003; Kessler, 2004). This clinical population has increased psychiatric and physical health problems (Mueser, Drake & Wallach, 1998), increased treatment difficulties (McKeown & Liebling, 1995), increased problems with housing and employment, increased family dysfunction, and less social support (Mueser et al, 1998) when compared with other clinical populations. Studies have also found associations between dual diagnosis and violence (Johns, 1997), premature death (Maynard, Cox, Hall, Krupski, & Stark, 2004) suicide (Barak, Cohen, & Aizenberg, 2004), homicide, and other crime (Williams & Cohen, 2000). The substance disorder component of dual diagnosis is correlated with increased risk of violence, both towards others, and self (Dalton, Cate-Carter, Mundo, Parikh, & Kennedy, 2003; Estroff, 1998; Johns,
The ECA study found individuals experiencing dual diagnosis are the most likely to have committed a recent violent act, with an individual with a dual diagnosis being twelve times more likely to have committed recent violent behaviour, compared to an individual with a diagnosis of schizophrenia being three times more likely, and an individual with a substance use disorder being ten times more likely to have committed a recent violent act (Johns, 1997).

Some of these negative effects may not be directly attributable to symptomology of the dual diagnosis conditions, but may instead be due to discrimination. Treatment and housing programmes may specifically exclude the dually diagnosed (Drake & Muesser, 1996, cited in Davis, 2003), dual disorder clients may be excluded from medical treatment, employment, and be rejected by social and family groups, due to their diagnoses of their disorders, rather than due to the symptoms or behavioural effects of the disorders (Drake & Muesser, 1996 cited in Davis, 2003). The dually diagnosed are more vulnerable to harm than other populations (due to lack of financial, treatment and social supports) and may also experience more victimisation than other clinical populations (Drake & Muesser, 1996 cited in Davis, 2003).

There is a body of research which suggests that the harm of co-morbid disorders has been over estimated and overstated, and that impacts may be less severe than previously found (Cantwell, 2003; Warner, Tayler, & Wright, 1994; Zisook, Heaton, & Moranville, 1992). There is also a growing body of research which suggests that substance use by people with mental illnesses can have positive impacts for some individuals. Although, by definition, this would then logically exempt these individuals from being diagnosed as dual diagnosis, there is a tendency for any
substance use by individuals experiencing mentally illness to be diagnosed as problematic, so this research is important to discuss.

Research studies have suggested that some substance use alleviates negative symptoms of schizophrenia (Phillips & Labrow, 1998), that cannabis may act as a mild antidepressant (Sellman, personal communication, 2004), opiates may alleviate symptoms of PTSD (Labrow, personal communication, 2004) and alcohol can reduce social anxiety (Knipe, 1995). Substance use by individuals with mental illness is reported to alleviate a number of unpleasant symptoms including low mood, heightened anxiety, sleeping difficulties, sexual functioning difficulties, and may alleviate boredom, and increase social functioning (Labrow, personal communication, 2004).

Use of substances for symptom management is met with huge variances in success, and in some instances short term benefits may be outweighed by longer term harm, however this research indicates the need for comprehensive assessment of levels, patterns, and effects of substance use in all clients, in order to avoid misdiagnosis, or inappropriate treatment planning. Likewise, dual diagnosis clients are not a homogenous group, and there can be profound differences in symptomology depending on the illnesses suffered, and substances used, again highlighting the need for comprehensive assessment.

Causality

Much research has focused on the temporal association between mental illness and substance use disorders, and this issue is one which impacts on attitudes towards dual diagnosis, as clinical experience suggests that many clinicians consider dual diagnosis to be most commonly caused by substance use triggering mental health
disorders. Some research does support this belief, and finds that substance use most commonly precedes, and is associated with, the development of mental illness (Flaum & Schultz, 1996; Gomez, Primm, Tzolova-Iontchev, Perry, Vu, & Crum, 2000; Mohammad, 1993; Rey & Krabman, 2004; Soar, Turner, & Parrott, 2001; Verdoux, Grindre, Sorbara, Tournier & Swendsen, 2003); however other studies have found that mental illness most commonly precedes, and is associated with, the development of substance use problems (Kessler, 2004; Zimmermann, Wittchen, Hofler, Pfister, Kessler, & Lieb, 2003). Kessler (2004) suggests an additional two possible types of temporal association between mental health and substance use disorders; co-morbidity may occur by chance – as actuarial rates of both of these disorders are high (Hoes, 1997, Kessler, 2004); and co-morbid conditions may develop due to common etiological causes (Brook, Richter, & Rubenstone, 2000; Clark, Vanyukov & Cornelius, 2002; Hoes, 1997; Kessler, 2004; Turner, 1995).

Bacharach (1987) considers a social explanation for the association of mental health and substance use disorders, suggesting that trends for community care, rather than institutionalised care, is partly to blame for the large percentage of mentally ill individuals who develop substance use disorders. He argues that when individuals experience mentally illness they frequently lose family, social and employment supports, experience downward socioeconomic drift, and are therefore more susceptible to drug and alcohol use, both due to increased stressors, and due to increased exposure to substance using others in their environment (1987).

In practice establishing the exact onset of disorders relies on valid self or other report, which in turn relies on both the memory of, and clear understanding of, historical processes, events and associations, requirements which are difficult to meet. Thus it can be very difficult to tease out the temporal association between disorders,
and although establishing the association is clearly important, particularly in terms of health promotion and harm reduction/ minimisation, it is suggested that at the individual treatment level establishing temporal association is of less importance than understanding the way the dual disorders interact. Understanding the interaction of co-morbid conditions, and “the factors that maintain, and reinforce, co-existing disorders” (Todd et al., 2002) is paramount in order to both effectively diagnose and treat dual diagnosis conditions, but focusing on causality of dual disorders at a treatment level may be unhelpful.

**Treatment of Dual Disorders**

Research has shown that unless co-morbid mental health and substance use disorders are both addressed appropriately, treatment outcomes are less positive (Drake, 2003). Minkoff (1989, in Davis, 2003) suggests that dual diagnosis treatment can be sequential (treating first one then the other disorder), parallel (treating each disorder concurrently, but using different clinicians, approaches and often services), or integrated (either specialist services, or multiple service providers using comprehensive case management techniques, provide a single comprehensive treatment plan). Doug Sellman, of the National Addiction Centre, suggests that the ideal service provision for dual diagnosis would be integrated, with mental health services trained and resourced to deal with mental health disorders, and mild to moderate substance use disorders; drug and alcohol services trained and resourced to deal with substance use disorders and mild to moderate mental health disorders; and the two services working closely together to deal with the clinical population with severe dual diagnosis disorders (Sellman, personal communication, July 30, 2004).
National clinical guidelines for the assessment and management of people with co-existing substance use and mental health disorders (Todd et al., 1998) recommend use of an integrated approach incorporating comprehensive assessment and treatment management planning from a biopsychosocial perspective which considers "predisposing, precipitating, perpetuating and protective factors" (Todd et al., 1998, pp. 32-33). Todd et al. suggest use of an engagement-persuasion model with motivational interviewing techniques to enhance therapeutic engagement, cognitive behavioural modalities and medication to address specific symptomology, and cognitive behavioural techniques to address relapse prevention (Todd et al., 2002).

Unfortunately treatment for both categories of disorder does not always occur. For a variety of reasons misdiagnosis and inappropriate treatment of dual disorders is common within both mental health and substance use disorder services (Todd et al., 2002). Both misdiagnosis, and inappropriate treatment, of dual disorders may lead to only one disorder (normally the one considered 'primary') being treated, or may lead to clients being refused service for either category of disorder, as services each judge the disorder they do not treat as primary, and so refuse service. The phenomenon of clients being referred back and forth between alcohol and drug, and mental health services, is well recognised (Drake, 2003) and has been termed the "ping pong ball effect" in America (Osher & Drake, 1996) and the "tennis ball effect" in Britain (Phillips & Labrow, 1998).

The differences in training, experiences, theoretical paradigms, attitudes and beliefs between alcohol and drug service providers, and mental health providers, can create significant barriers to care for dually disordered clients. Labrow (2003) states that "the substance misuse and psychiatric / mental health fields are often two
dichotomous systems working with totally different philosophical and therapeutic approaches” (Labrow, unpublished departmental report, 2003, p.4).

**Services in Aotearoa New Zealand**

In Aotearoa New Zealand clients with dual diagnoses present to a wide range of service providers, and it can be unclear at times as to where they best fit. Different regions and associated District Health Boards (DHBs) have different approaches to this issue, and these range from specialist dual diagnosis services, through to no identified service at all. Mental health services, and drug and alcohol services, may both be contracted to work with individuals with parts of this problem, but it can be unclear as to where the responsibility for dual diagnoses lies. Where no identified service is available it is not uncommon to find apparent exclusion criteria from mental health services for clients with co-morbid substance problems, and apparent exclusion criteria from alcohol and drug services for clients with co-morbid mental health disorders.

The New Zealand Government and the NZ Ministry of Health (MoH) have identified the need to prioritise services for those with complex needs, including dual diagnosis, in a number of current policies and national guideline documents. These include “The Service Coverage Schedule (Final), Blueprint for Mental Health Services, National Mental Health Sector Standards, New Zealand Health Strategy, National Drug Policy, National Health Strategy 2000-2003, Youth Health Strategy, Maori Mental Health Strategy, and DHB Toolkits” (Labrow, 2003,p.8). The National Strategic Framework for Alcohol and Drug Services (MOH, 2001) identified treatment of coexisting disorders as one of its main priorities, and identified the “need for broad intersectorial, collaborative, multidisciplinary and co-ordinated approaches at all levels of care” (p. 18), “the need for an available and sufficiently trained
workforce” and “the need to improve the treatment of those with co-existing disorders by ensuring accessible general and specialist services” (p. 26). The 1999 assessment and treatment guidelines as outlined in “The Assessment and Management of People with Coexisting Substance Use and Mental Health Disorders” (Todd et al., 1998) were commissioned by the Alcohol Advisory Council of New Zealand, the Ministry of Health and the Mental Health Commission due to concerns about service provision to this client group.

Barriers to Treatment

Significant barriers to care have been found for dually diagnosed clients in both international and national research. A 1987 American National Institute of Mental Health (NIMH) study suggested barriers included “inadequate funding”, “stigma toward dually diagnosed persons on the part of the public and providers”, “differences in philosophy and treatment approaches between the mental health and substance abuse fields”, “lack of qualified personnel”, and inadequate political support (NIMH in Brown, Ridgely, Pepper, Levine, & Ryglewicz, 1989, p.565).

An Aotearoa NZ survey of clinicians, consumers, and family members of consumers of mental health and drug and alcohol services conducted by Todd, Sellman, and Robertson of the National Addiction Centre discovered systemic, clinical, and attitudinal barriers to optimal care for dually diagnosed clients (Todd et al., 2002). Systemic factors included – “inadequate provision of services for the treatment of dual disorders, inadequate planning, funding, poor resourcing, poor access to, and systemic support for, appropriate treatment options, gaps between services, and lack of workforce development” (Todd et al., 2002,p.795). Clinical factors included “a perceived lack of training, experience, knowledge, and skills in working with dual disorders”, and “negative attitudes towards the dually diagnosed”
(Todd et al., 2002, p.795). The 5 attitudes identified as creating barriers to optimal care in the Todd, Sellman and Robertson study were “judgemental attitudes, rejection of a disease model, territoriality between professional groups and regions, insistence on abstinence and confrontation” and the belief that “addiction is not the business of mental health services” (2002, p.795).

It is considered that clinician negative responses to dual diagnosis clients may occur due to the known complexity and risk involved with dual disorders, and also due to attitudes about the substance use component. In a review of professional attitudes in the criminal justice, medical, and social services, sociologist Fulton found that health professionals are resistant to working with individuals with substance use problems (Fulton, 2001). She found this was due to low treatment optimism, clinician “disappointment and frustration”, and clinicians feeling “deskilled” with this client group (Fulton, 2001, p.8). Fulton considers that this is in part due to clinicians holding the same beliefs as the general public with regard to responsibility for development of substance use disorders (Fulton, 2001).

Attitudinal research amongst psychiatrists by Farrell and Lewis (1990) found that “…cases once given the diagnosis of alcohol dependence were judged unlikely to complete the course of treatment or to comply with advice, would not be liked in the clinic, would not arouse sympathy, and would annoy the doctor” (p.886). They also found that psychiatrist’s negative attitudes were reflective of general society’s attitudes, that holding these attitudes negatively affect treatment outcomes, and that increased knowledge about substance use disorders lessens these negative attitudes (p.888), a finding also supported by Christison and Haviland (2003).

In her study specific to professionals working with dual diagnosis clients, O’Neil (1997) found that experience “was negatively related to” pessimism (p.293).
The national clinical guidelines The Assessment and Management of People with Co-existing Substance Use and Mental Health Disorders noted that “successful programs are characterised by clinicians who remain optimistic and positive” (Todd et al., 1998, p.71). It is in the area of clinician attitudinal barriers to care that the current study is based, and attribution theory will be applied to this area.

**Attribution Theory**

Attribution theory and research has shown that judgments about levels of responsibility, controllability and stability, and other related attributions, are used by people to understand and explain the causal links between events, human behaviours and outcomes (Malle, 2001). Attribution theory states that attributions are used with the assumption that people freely choose their actions, that they intend to act, and that they act in order to gain positive consequences (Kelley, 1967). The field of attribution research can be divided into two areas – attribution research, which studies the formation and use of attributions, and attributional research, which studies the consequences of the use of attributions (Fosterling, 2001).

There is debate about the face validity of some of the methodology used in attribution research. This essentially centres around the artificialness of forced attributions, however these difficulties in measuring what occurs in the ‘black box’ of the human mind are not new, and debate into the validity of studies in cognitive psychology has a long history in psychological research. Empirical research has supported the finding that attribution processes are a common phenomenon (Weiner, 1995) and measurement of spontaneous attributions has occurred (Hewstone, 1989; Leggett & Silvester, 2003). Research into multicultural use of attributions has found that attributions are used in many cultures, both when required to do so by methodology (Bond, 1983 in Hewstone, 1989), and in natural settings (Rudolph,
Roesch, Greitemeyer, & Weiner, 2004). Thus there is ample empirical evidence that attributions are routinely used, and that the study of attributions and their attributional consequences is a valid tool for understanding aspects of social behaviours (Fosterling, 2001).

**Attribution Errors and Biases**

Attribution theory looks at how people judge behaviours – it does not necessarily evaluate the accuracy of the judgements made (Davies, 1992).

The systems of knowledge upon which we base our attributions need not be based on observations, or other valid forms of information gathering, but may be based on "widely held prior beliefs, expectancies, attitudes, stereotypes and other aspects of subjective social knowledge" (Davies, 1992, p.26). People act on the basis of their beliefs about the world, regardless of whether their beliefs are accurate, valid, or based in reality (Heider, 1958), and Kelley argues that veridicality is dependent on the "state of information regarding the world", "experiences", "social sources" and as such is "subjective" (Kelley, 1967, pp.196-198). Shaver suggests that complex social situations, and social situations in which attributions are based on information from others, are especially prone to errors (Shaver, 1985).

Recent models of attribution theory have suggested that the attribution process is affected not only by the type and quality of information available, but is also affected by amount of cognitive processing that the individual is carrying out at the time; and Krull and Anderson (2004) suggest a tendency for people to be “cognitive misers who make quick judgements based on the causation information most obvious” (p.5152).

One of the most commonly occurring attribution errors is the fundamental attribution error, in which people over emphasise internal, and underestimate external
(situational), causes for other people’s negative behaviours or outcomes; and under estimate internal and overestimate external (situational causes) for their own negative behaviours or outcomes (Weiner, 1995). Thus in observing a person drinking heavily at a social engagement, we might judge that they are a heavy drinker per se (internal cause), whilst attributing our own heavy drinking to simply celebrating the social event (external cause).

Another common defensive attribution error is the 'just world hypothesis' in which we believe that the world is a fair place and that good things happen to good people and bad things happen to bad people, so individuals are in some way at fault (either by intent or negligence) for negative outcomes (i.e. they are bad people – or at least bad decision makers) (Fosterling, 2001).

The Consequences of Attributions

Research has not only looked at how and why we form attributions about one another, it has also looked at the effect that attribution making can have. Making attributions not only helps us understand and explain other people’s behaviour, it also helps us decide how to react towards both the behaviour, and the person. For example, Shaver’s augmentation principle suggests that if an individual acts despite knowing that there is a possibility of a negative outcome, attributions about causality, responsibility and blame will be more “harsh” than otherwise (Shaver, 1985).

Research has shown that different conditions are judged differently in terms of attributions made towards the conditions in general, and this use of socially determined attributional schemata can lead to stigmatisation and discrimination. For example drug and alcohol use related conditions have been shown to be more stigmatised than mental health disorders (Weiner, Perry, & Magnusson, 1988). Hewstone (1989) considers that social attributions with regard to causality, blame, and
responsibility towards individuals and conditions are an integral part of social control, social reward, and punishment (Hewstone, 1989). Davies suggests that finding an individual, or group, responsible for problems not only appears to solve problems of causality, but also appears to suggest solutions (Davies, 1992).

When individuals are found responsible and blamed for negative events there can be important consequences. Given that research shows that drug use is more stigmatised than mental health disorders (Weiner, 1995), it is suggested that the drug use component of dual disorders creates some of the negative clinician attitudes to dual diagnosis. The Committee on Addictions of the Group for the Advancement of Psychiatry suggested that “excessive use of alcohol or drugs” is considered by others to be “controllable” and determined by “free will” (Boyarsky, Dilts, & Frances, 2002, p.707). Individuals with drug and alcohol problems are considered more responsible for their problems, their problems are seen as caused by internal factors rather than external, and they are less likely to receive help, time and resources from providers than individuals with other disorders (Watson, 2002; Weiner, 1995). Research also suggests that clinician negative attributions about substance use are reflective of general societal negative attributions (Watson, 2002). These attitudes are likely to be partly based on personal observations, and partly on socially determined schemata.

Attributional research has looked at how to destigmatise conditions, and has suggested that using biologically based medical type models as explanations of disease change controllability and responsibility attributions, and thus lessen stigmatisation towards these conditions (Dietrich, Beck, Bujantugs, Kenzine, Matschinger & Angermeyer, 2003). NZ research (Read & Harre, 2001; Read & Law, 1999) has however suggested the opposite – that use of biological explanations actually increases stigmatisation. Instead Read and Harre (2001) suggest that positive
contact with stigmatised people reduces stigmatisation. In 1998 the British Royal College of Psychiatrists (2003) commenced a long term destigmatisation campaign for mental health and alcohol and drug disorders. In this campaign they suggest that “it is the behaviour (drug and alcohol misuse) that should be stigmatised, not the individual” (p. 8) and whilst it seems somewhat unusual to actually suggest active stigmatisation in a destigmatisation campaign, the point they make about separating the behaviour from the person is a valid one.

In looking at clinician beliefs about substance use Boyarsky, Dilts and Frances, writing as the Group for the Advancement of Psychiatry Committee on Addictions, suggested that “providers be aware of their own views on the relative roles of personal responsibility, and of forces outside personal control, in the onset and progression of and recovery from these disorders” (2002, p.707). Likewise in their discussion of responsibility and addiction Watson and Corrigan issue a challenge to the research community stating that “clearly, what is needed now is research that examines how beliefs about responsibility for onset, progression, and recovery influence clinical practice and policy” (Watson, 2002, p.1328). The current study aims to take a small step towards taking up the above challenges by examining “how beliefs about responsibility... influence clinical practice”. This will be done using Weiner’s theory of social conduct.

**Weiner’s Theory of Social Conduct**

Weiner’s 1995 theory of social conduct is a cognitive affective attribution model which postulates that when individuals are attempting to understand and react to a situation they use a “thinking – feeling – acting sequence” (Weiner, 1995, p.259). For a detailed account of this theory and its development see Weiner, 1995, and Rudolph et al, 2004. This model, and Weiner’s earlier models of social behaviour,
suggests that attributions about responsibility and controllability vary according to the conditions being judged; these mediate emotional responses along an anger/sympathy continuum; and these impact on motivation to help (Weiner, 1995). A 2004 meta-analysis of 64 studies using Weiner's Theory of Social Conduct concluded that the following model best describes how attributions affect helping behaviours:

**Figure 1. Attributional affect help model**

| Controllability/Responsibility | → | Sympathy/Anger | → | Help giving |

(Rudolph, Roesch, Greitemeyer, & Weiner (2004).)

Weiner makes links between attribution theories and attributional theories by not only looking at the attribution made about events, but by also looking at the subsequent impact attributions have. This theory developed within achievement research; but earlier versions and the more recent version have been applied to, and proven effective in, offering explanations about a diverse range of social behaviours including stigmatism, discrimination, helping behaviour, aggression and excuse giving (Weiner, 1995).

Weiner presents a large amount of research to empirically support his theory (see Weiner, 1995, for presentation and discussion of this research) and a meta-analysis of studies using Weiner's theory carried out by Rudolph, Roesch, Greitemeyer and Weiner (2004) strongly supports the hypothesis that responsibility attributions mediate affective and behavioural responses. This meta-analysis also
found that affective attributions are more proximal to helping behaviour than cognitive ones (Rudolph, Roesch, Greitemeyer, & Weiner, 2004).

Weiner’s theory has been successfully applied to clinician helping behaviour with a variety of conditions (Chibnall & Tait, 1999; Dagan & Cairns, 2005; Dagan, Trower & Smith, 1998; Marteau & Riordan, 1992; McKay & Barrowclough, 2005; Sharrock, Day & Qazi, 1990), however at the time of writing no research had been published applying it to the condition of dual diagnosis.

Lopez and Wakenstein (1990) suggest strengths of Weiner’s theory are that it “considers causal dimensions other than locus” and it “calls attention to the specific linkages between attributions and important psychological consequences such as expectancies, affective reactions and help giving” (p.110). Cross cultural research has been carried out which suggests that the findings with regard to responsibility, controllability, emotional responses and helping response generalise across cultures (Weiner, 1995). Versions of the theory have been applied to a variety of areas, and there is strong empirical support for the theory.

Weaknesses suggested by Lopez and Wakenstein (1990) are that etiological causes for clinical problems are more complex than problems in the achievement domain (where this theory originated); and as such additional conceptual models are needed to fully understand clinical judgements. However, Weiner (1995) makes it very clear that he is wary of any theory which purports to explain all aspects of anything, and describes his theory as offering partial explanations of aspects of social behaviour (1995). A methodological weakness of much of the empirical evidence in support of this theory is that many of the studies were carried out with college students in artificial situations, however the meta-analysis of studies using Weiner’s theory carried out by Rudolph, Roesch, Greitemeyer and & Weiner (2004) confirms
that the theory "holds true for real events as well as simulated data" (p.815). Weiner's model has been successfully applied to clinical situations, however Jones and Hastings (2003) failed to find any significant support for Weiner's model when applied to staff attributions regarding self-injurious behaviours in learning disability services; and they argue that support suggested by earlier studies (Dagnan et al., 1998; Stanley & Standen, 2000) is weak.

What is clear from a literature review of the application of Weiner's theories to clinical situations is that different studies have found different outcomes. Some are supportive of Weiner's model (for a list of these see Weiner, 1995), some support different aspects of Weiner's model (Mackay et al., 2005; Sharrock et al., 1990; Dagnan et al., 1998; Marteau et al., 1992; Chibnall et al., 1999, Lopez et al., 1983), and some do not support the model at all (Jones et al, 2003). Given that the studies currently in the literature have been conducted in a variety of setting with a variety of methodologies this is not unusual, and it is unlikely that one model would be sufficient to explain behaviour in all situations. Upon review of the current literature there appears a sufficient empirical basis upon which to justify the use of this model to investigate staff attributions towards dual diagnosis clients.

**Responsibility, Controllability, Stability**

Weiner's model begins by looking at attributions of controllability and responsibility, with the suggestion that a condition is judged to be controllable by a person, judgements of responsibility then occur. When making responsibility judgements intentionality and mitigating circumstances are taken into consideration, and different levels of responsibility may be ascribed (Weiner, 1995). Weiner moves away from the consideration of blame, which is predominant in earlier attribution
work, arguing that blame is actually a combination of a responsibility judgement and an angry affective reaction - therefore he separates these constructs.

Attribution research has shown that individuals considered highly responsible for their conditions were "relatively disliked, evoked little pity and comparatively high anger, and elicited low help giving intentions" (Weiner, 1995, p.62). Weiner also suggests that "illness severity and responsibility for the illness are most predictive of social rejection (Weiner, 1995, p.60). Research looking at allocation of resources subsequent to attribution making has found that when resources are scarce, conditions considered more controllable are allocated fewer resources than less controllable conditions (Weiner, 1995).

Research has also distinguished differences in attributions regarding the responsibility for the onset of a disorder and the offset of it (Brickman Rabinowitz, Karuza, Coates, Cohn & Kidder, 1982). Within mental health and substance use disorder treatment settings, and professions, different aetiological theories attribute different levels of responsibility for the onset, continuation, and offset of disorders.

Weiner offers a discussion about his view of different theories and how they differ with regard to responsibility for offset and onset of disorders in his discussion of 'alcoholism' (1995, p.69). He suggests that the medical model attributes responsibility for "neither the onset nor the offset" of a disease (p.71); the moral model sees the individual as completely responsible both for the onset and the offset; the enlightenment model (such as Alcoholics Anonymous) sees the individual as responsible for the onset but not offset of disorder; and the compensatory model sees the individual as not responsible for the onset, but responsible for the offset of disorder (Weiner, 1995). Although the names of these models may not be exactly the same as those described by other theorists, they do encompass the range of different
views within this field, and as such, looking at the way some models completely contradict one another, it is easy to see why different clinical professional settings and groups which use different etiological theories may have difficulty communicating and working together in integrated ways.

Although Weiner does not appear to include stability attributions in his theory, other attribution research demonstrates that helping profession staffs attributions about stability influences their attitudes towards patients (Sharrock et al, 1990; Dagnan et al, 1998; Marteau et al, 1992; Chibnall et al, 1999; Brewin, 1984). Judgements of stability have been found to be directly related to judgements of prognosis, (with greater stability being seen to indicate a less favourable prognosis as there is less chance of change) and judgements of stability have been found to be directly related to help giving. (Lopez, 1983 in Lopez and Wakenstein, 1990). For this reason stability was also measured in the current study.

In considering application to the field of dual diagnosis, attribution research has shown that individuals tend to be judged as highly responsible for behavioural/ and mental illnesses such as schizophrenia (Neff & Husaini, 1985, in Weiner, 1995 pp.129); and depression (Weiner, 1995). Likewise attributional studies have found that ‘illicit drug use’ is judged to be more controllable than other conditions (Mackay et al, 2005). Weiner suggests that “drug abuse may automatically be linked with moral weakness” (Weiner, 1995, p.61), and is a condition for which individuals tend to be judged highly responsible. “Alcoholism” is also a stigmatised condition found to be judged highly controllable (Weiner, 1995, p.62), and research amongst both lay and professional people has shown that ‘alcoholics’ are judged to be highly responsible for their condition (Weiner, 1995).
Treatment Efficacy

Weiner’s general theory does not specifically measure optimism towards outcome of helping behaviour, however some attributional studies have found that treatment optimism is a better mediator of helping responses than affective responses (Dagnan et al, 1998; Sharrock et al, 1990; Todd & Watts, 2005) and optimism has been shown to be “an important component of good care practice” (Sharrock et al, 1990). For this reason treatment efficacy was measured in the current study. Sharrock et al’s 1990 study found that stability mediates attributions of treatment optimism, which Stanley & Standen, (2000), suggest “may be better explained by Weiner’s (1979) model of achievement motivation than as a test of his 1986 model of helping behaviour” (p.159).

Affective Responses

Weiner's attributional theory suggests people have an emotional reaction to events which are contingent in part on the attributions of controllability and responsibility that they make about the event (Rudolph et al, 2004), and that affective reactions impact on subsequent helping behaviour (Mackay et al, 2005; Carlson & Miller, 1987 in Weiner, 1995, p.144). Weiner considers that if attributions about an event lead to negative affective reactions such as anger or annoyance, help is less likely to be offered (especially in response to behavioural-mental conditions, (Weiner 1995, p.139)), as negative outcomes may be seen as deserved (Weiner, 1995). In contrast, if positive affective reactions such as sympathy or pity are experienced, there is a higher likelihood that help will be offered, as negative outcomes are seen as unjust (Weiner, 1995). Weiner acknowledges that the relationship between thoughts and affect is bidirectional, and affect may well impact on thoughts as well.
Emotional responses to attributional judgements not only impact in terms of help responses, but may also impact emotionally on the person being judged. Emotional expression research has demonstrated that the interpersonal emotions an individual is subjected to can be influential on emotional and psychological wellbeing (Fosterling, p. 166).

Weiner (1995) suggests when families judge a schizophrenic illness as controllable they experience higher levels of hostility, anger and criticism towards the individual, than when the illness is judged uncontrollable. This expression of negative emotions communicates to the unwell individual that they are responsible for their illness and symptoms, which inhibits coping responses and increases the likelihood of relapse (Weiner, 1995). In contrast families who attribute illness to uncontrollable causes experience and exhibit more sympathetic responses, which in turn leads to more positive behaviours by both the unwell individual and the family, which lessens symptomology and relapse (Weiner, 1995). Research has also shown that staff expression of emotions towards patients can have similar consequences as family expressions (Moore, et al. (2002).

**Behavioural Responses**

Weiner argues that “help and aggression” are survival responses which “form the backbone of evolutionary approaches to social conduct” (Weiner, 1995, p.143) and defines helping behaviour as “going towards others to administer aid and support” and aggression as “going against others to eliminate them by imposing something negative or withholding something positive” (Weiner, 1995, p.143). As discussed Weiner’s theory suggests that attributions impact on helping responses and this has been supported by a number of empirical studies (Betancourt, 1990; Schmidt & Weiner, 1988, in Weiner, 1995). Subsequent research has shown that attribution
making affects not only direct help giving, but also allocation of money, time and resources (Weiner, 1995).

Some research shows that correlations between controllability judgements and help giving are smaller than the correlations between affective ratings and help giving, and suggest that “the affective reaction is a more proximal determinate of help giving than controllability judgments” (Fosterling, 2001, p. 159). However a 1990 study of Weiner’s model with professional care staff conducted by Sharrock et al., (1990) failed to find correlations between affective reactions and helping behaviour, and Sharrock et al. suggest that “the absence of correlations with helping behaviour may indicate that care staff have learned not to be influenced significantly by their affective reactions to patients behaviour” (p.854). They go on to suggest that helping behaviour appears more related to treatment optimism and that “attributional tendencies may still be important in maintaining levels of staff optimism” (Sharrock et al., 1990, p.854).

Weiner is careful to note that a variety of factors can influence helping behaviours including proximity, safety, number of other people available to help, resource scarcity, individual physical and emotional health, personal involvement and relationship with the individual requiring help; and thus his theory offers partial, by no means complete, explanations of behaviour. (Weiner, 1995).

Professional Help Giving

Weiner states that judgements about personal responsibility “influence not only the reactions of laypeople but also the care that practitioners, both from the medical and psychological professions, may give to their patients” (Weiner, 1995, pp.60 - 61) Clinicians working with people make judgements with regard to the diagnosis, prognosis and causes/ reasons for the disorder. These judgements inform
treatment decisions, and according to Weiner's theory, also mediate the emotional and helping responses of clinicians (Lopez and Wakenstein, 1990, p.104).

Lopez and Wakenstein (1990) cite Lopez's 1983 study which found "judgements of the controllability of the perceived causes were virtually unrelated to the therapists' report of their affective reactions and their interest in providing help", but did find that help giving was related to affective reactions (p.109). In considering the application of his theory to the area of clinical staff attributions Weiner (in personal communication, 2005) suggests that "clinicians are trained to feel compassion and not anger for their clients" - suggesting that social desirability may strongly affect the responses found to affective response questions in attributional studies.

Attributional research has shown that attributional schema can be changed. Weiner states that "Perceptions of the controllability of the onset of many stigmas can be altered" (Weiner et al., 1988, p.745). He says:

"What in part appears to be needed are procedures and methods of education that point out the array of determinants of the onsets of stigmas such as obesity and drug addiction that lessen the perceived responsibility of the stigmatised person. These determinants embrace both liberal (environmental) and conservative (genetic) causes". (Weiner et al., 1988, p.746).

However in 1995 Weiner cautions that ""It is not entirely certain in what direction causal beliefs should be altered to benefit the stigmatised" (1995, p.84) as he makes the point that changing attributions from controlled to uncontrolled is likely to shift affective reactions, but at the same time may disempower the client in terms of ability to change, as Weiner emphasises that psychotherapy is based on ability for
"personal change’ and “accepting responsibility for ones actions” (Weiner et al., 1988, p.746).

It would seem that an ideal solution to the dilemma of changing responsibility and controllability attributions would be use of a model which emphasises non responsibility for the onset disorder, but responsibility for the offset (Brickman, 1982). Obviously such a model needs to be evidence based and cannot be adopted simply for the convenience of changing attributions; however it is suggested that such a model exists, and is recommended by the New Zealand clinical guidelines The Assessment and Management of People with Co-existing Substance Use and Mental Health Disorders (Todd et al., 1998). This recommends that clinicians and services work together in an integrated approach using complementary conceptual frameworks based on the medical model combined with a psychosocial approach (a biopsychosocial approach).

This model is based on disease type concepts, with the individual viewed as not responsible for the onset of disorder, which may have occurred due to biological predisposition with contributing psychosocial factors (this is possibly a combination of what Weiner describes as the medical model and the compensatory model). This approach is evidence based, and encompasses comprehensive assessment and treatment management planning based on consideration of biopsychosocial “predisposing, precipitating, perpetuating and protective factors” (Todd et al., 1998). This model is inline with current psychological assessment and treatment ideology.

In this model clients and clinicians are encouraged to think of the dual disorders as similar to other lifestyle disorders like type 2 diabetes. Genetics and lifestyle combine to create the disorder. Poor lifestyle choices might be involved, but they might be lifestyle choices that are common in our society, which many people
can make without developing disorder. The presenting client however, is not so lucky, and due to biological predispositions these lifestyle choices result in the development of disorder for them. Treatment then consists of creating understanding in a non-judgemental way that that these lifestyle choices create disease for this individual, and then motivating, teaching, enabling and empowering the client to make different lifestyle choices and to participate in other required treatments.

NZ Research

Multicultural research conducted in a variety of populations has found support for attribution models and theories in a variety of countries (Weiner, 1995); however at the time of writing no research was available to assess the suitability of applying Weiner’s theory to the NZ population. A literature review indicated that attribution research has been applied in New Zealand, however no information about the suitability of these approaches specific to NZ was found. One study was found which applied Weiner’s attributional model of achievement motivation to sports in NZ.

International multicultural research has found minor differences in the internal – external dimension of attribution making between individualistic and collectivist cultures, which may have implications with regard to possible differences in attribution making between Pakeha and Maori / Pacific Island populations in NZ.

The Current Study

Weiner (1980, 1986 in Mackay & Barrowclough, 2005, p.263) “predicted that his model of helping behaviour would generalise over a variety of helping situations” (1980, p.197). The current study hypothesises that negative clinician attitudes towards dual diagnosis clients found by Todd et al. may arise in part due to attributions made about these clients (2002). This suggestion seems supported by statements reported by Todd et al. (2002) such as “implicit beliefs that substance use problems were a matter
of choice and therefore a personal or moral deficit remains evident”, “addiction is not the business of mental health services”, and “patients turned away regardless of other mental health problems suffered” (p.795). The current study aims to apply Weiner’s Theory of Social Conduct to the area of dual diagnosis.

**Hypotheses**

The hypotheses of the current study were:

1. That clinicians would attribute more controllability and responsibility, less stability and less belief in treatment efficacy, towards a vignette describing a dual disorder client than towards a vignette describing a client with a mental health disorder only.

2. That clinician affective responses towards a vignette describing a dual disorder client would show more anger and annoyance, and less sympathy, than towards a vignette describing a client with a mental health disorder only.

3. That clinicians would allocate less time and resources to a vignette describing a dual disorder client than towards a vignette describing a client with a mental health disorder only.

4. That clinicians affective responses towards a vignette describing a substance use disorder client would show more anger and annoyance, and less sympathy, than towards a vignette describing a client with a mental health disorder.

5. That clinicians would not allocate any time and resources to a vignette describing a substance use disorder client (as the client will be judged not meeting the criteria for mental health services).
Method

Participants

Approval was gained from an Aotearoa New Zealand District Health Board, Massey University Human Ethics Committee, and the Northern Y Regional Ethics Committee, to distribute an anonymous questionnaire to all mental health clinicians within the selected District Health Board. In the interests of confidentiality the DHB in which the study was conducted will not be named. Participation was voluntary, and thus subjects were selected by a non-random, self-selecting, convenience design. Not all Clinical Team Managers responded to the request for access to clinical teams, so although there were a target of 120 FTE positions within mental health services (although not all of these were filled at the time of administration) only 70 questionnaires were distributed. 29 completed questionnaires were returned, giving a 41% response rate.

69% of participants were female (n = 20) and 31% were male (n = 9). 45% identified as being in the 24-39 years of age demographic (n=13), 41% identified as being in the 40-55 years of age demographic (n=12), and 14% identified as being in the over 56 years of age demographic (n=4). 14% of participants identified as Maori (n=4), 52% identified as being NZ European (n=15) and 34% identified as Other (n=10).
Table 1. Years of Experience in Mental Health Work

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 2 years</td>
<td>3</td>
</tr>
<tr>
<td>2-5 Years</td>
<td>7</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>5</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>3</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>5</td>
</tr>
<tr>
<td>Over 20 Years</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
</tr>
</tbody>
</table>

90% of participants said that they had experience working with clients with alcohol & drug problems (n=26), with 10% saying that they did not have experience working with this client group (n=3).

Table 2. Years of Drug and Alcohol Experience

<table>
<thead>
<tr>
<th>N = 29</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Under 2 years</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>2-5 Years</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>15-20 Years</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Over 20 Years</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>
62% of participants said that they had training in working with clients with alcohol & drug disorders (n=18), with 38% saying that they did not have training in working with this client group (n=11).

Table 3. Hours of Drug and Alcohol Training

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Under 2 Hours</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2-8 Hours</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>9-24 Hours</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>25-40 Hours</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>40-80 Hours</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Over 80 Hours</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

Representativeness of Sample

Neither local nor national workforce statistics were available at the time of writing in order to establish if the demographics of the sample gathered was representative of the local and/or national mental health workforce.

Measures

Permission was gained from Bernie Weiner to adapt his ‘Help to the Stigmatised’ questionnaire (Weiner, 1995) for use in the current study. The procedure used in this questionnaire is one commonly used in attribution research. Weiner’s questionnaire asked participants to make attributions of responsibility and controllability, rate affective reactions of anger and sympathy, and allocate personal aid and a monetary award towards 10 different conditions. Attributions were rated on
a Likert scale, anchored at 1 to 7, with 1 being very low and “not controllable, not responsible, no anger, no sympathy, no personal aid, and 7 being very high and highly controllable etc” (Weiner, 1995, p.56).

Adaptations made to Weiner's questionnaire were the inclusion of 8 demographic questions regarding gender, age range, ethnicity, years of experience in mental health work, experience in drug and alcohol work, years of experience in drug and alcohol work, and hours of training in alcohol and drug disorders; inclusion of attribution variables stability and treatment efficacy; and the use of the three conditions specific to this study. Brief vignettes were written by the researcher, which were designed to appear similar to common referrals received by mental health teams (based on the researcher’s prior clinical experience). Vignettes depicted a gender non-specific individual, with the first vignette describing an individual who presented with symptoms typical of a psychotic mental illness alone, the second vignette describing an individual with symptoms typical of a psychotic mental illness combined with a substance use disorder, and the third vignette describing an individual presenting with symptoms of a substance use disorder alone.

Each condition started with the vignette depicting the condition and was followed by the same six questions in the same order. The two final questions asked participants to firstly allocate one new client appointment hypothetically available that day to one of the three depicted vignettes, and secondly asked participants to allocate thirty hours of available clinical time amongst the three vignettes. This modification to the helping variables was made after consultation with several clinicians at the DHB in order to make the questionnaire clinically relevant.

See Appendix A for a copy of the questionnaire.
Procedure

Once full ethical approval and permission was obtained to conduct the research, the Clinical Team Managers of each of the Mental Health Services Clinical Teams within the selected DHB were contacted. The researcher attended convenient clinical team meetings, briefly introduced the study to all staff present, and requested participation. Questionnaires were distributed to all clinical staff present, and left to be self administered as convenient within a one week time frame. A questionnaire return box was left at each site, and the site was re-visited after one week to retrieve the box.

As a token thank you to participants a portion of each questionnaire was removable upon which staff could provide contact details in order to be sent a free movie theatre ticket and / or a summary of the research findings. These details were posted in a separate compartment in the returned questionnaire box, and in no way was the researcher able to match names with completed questionnaires. Details of participant’s names was completely confidential to the researcher and this information was destroyed as soon as movie tickets and / or a summary of the findings was posted out.

A computerised statistical package – SPSS for Windows - was used to conduct data analysis. This consisted of correlational analysis to investigate the interaction of demographics and response patterns; ANOVAs and pairwise comparisons of all possible pairs using the Bonferroni multiple comparison test to analyse between condition variances; and bivariate correlational analysis to test the strength of the attribution – affective – help model. An alpha level of 0.05 was used for all statistical tests.
A priori power analysis indicated a sample size of 74 participants was required for the multiple regression analysis proposed in this study. Unfortunately only 29 participants responded to the questionnaire, so analysis to determine the predictive ability of the independent variables to the dependent variables was not carried out.

Posthoc power analysis indicated that with 29 participants in a within group between conditions design adequate power was established for the analysis of variance and Bonferroni multiple comparison test of most variables (with power of 0.38 for the hours variable, but a range of 0.64 – 1 for all other variables).

Results
Effect of Demographic Variables on Responses.

Analysis of correlations between demographic variables of age, length of mental health experience, length of drug and alcohol experience, and length of drug and alcohol training failed to find any significant correlations.

Within Group Between Condition Comparisons – Comparison of Means

A one-way, repeated measures within groups ANOVA was employed to compare the results of controllability, stability, treatment efficacy, sympathy and hours allocated attributions made towards the three vignettes. Pairwise comparisons of all possible pairs of means were conducted, using the Bonferroni multiple comparison test to control for possible familywise error rates. Friedman tests were used to compare the results of all possible pairs of variables for the attributions of responsibility and anger/annoyance towards the three vignettes, as the distribution of responses to these two variables did not meet the assumption of normality required for parametric testing. The distribution of the mean responses to each variable is depicted
in a series of histograms in Appendix B. The means and standard deviations of the responses to each of the variables are shown in Table 4.

Table 4. Descriptive Statistics for Attributional Responses to Vignettes

<table>
<thead>
<tr>
<th></th>
<th>Mental Illness</th>
<th>Dual Diagnosis</th>
<th>Substance Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Responsibility (29)</td>
<td>2.3</td>
<td>1.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Controllability (28)</td>
<td>3.1</td>
<td>1.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Stability (29)</td>
<td>2.7</td>
<td>1.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Treatment Eff (28)</td>
<td>5.5</td>
<td>1.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Anger/ annoy (29)</td>
<td>1.1</td>
<td>0.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Sympathy (29)</td>
<td>5.3</td>
<td>1.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Hrs Allocated (25)</td>
<td>11.9</td>
<td>4.0</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Comparisons of the means of the responses to each of the variables are depicted in Figure 2, and the mean differences are shown in Table 5.

Figure 2. Mean responses for between condition responses

Mean Responses

- Mental Illness mean
- Dual Diagnosis mean
- Substance Use Disorder mean
Table 5. Analysis of Variance for Within Group Between Condition Responses.

<table>
<thead>
<tr>
<th>Vignette X &amp; Y</th>
<th>Vignette X &amp; Z</th>
<th>Vignette Y &amp; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Illness &amp; Dual Diagnosis</td>
<td>Mental Illness &amp; Substance Use</td>
<td>Dual Diagnosis &amp; Substance Use</td>
</tr>
<tr>
<td>Mean Diff</td>
<td>p</td>
<td>Mean Diff</td>
</tr>
<tr>
<td>Responsibility</td>
<td>-1.2</td>
<td>0.000</td>
</tr>
<tr>
<td>Controllability</td>
<td>-0.4</td>
<td>0.652</td>
</tr>
<tr>
<td>Stability</td>
<td>-0.03</td>
<td>1.0</td>
</tr>
<tr>
<td>Treatment Efficacy</td>
<td>1.1</td>
<td>0.000</td>
</tr>
<tr>
<td>Anger/ annoyance</td>
<td>-0.7</td>
<td>0.000</td>
</tr>
<tr>
<td>Sympathy</td>
<td>0.7</td>
<td>0.001</td>
</tr>
<tr>
<td>Hours Allocated</td>
<td>1.8</td>
<td>0.231</td>
</tr>
</tbody>
</table>

Responsibility

A significant main effect was found for the differences in the attributions of responsibility made towards the vignettes. Differences in levels of attributed responsibility were significantly different between the mental illness vignette and the dual diagnosis vignette $X^2(1, N=29) = 18.0, \ p < 0.001$; between the dual diagnosis and the substance use disorder vignette $X^2(1, N=29) = 10.9, \ p < 0.001$; and between the mental illness and substance use disorder vignette $X^2(1, N=29) = 26.0, \ p < 0.001$. Table 4 and Figure 2 show that in the vignette depicting an individual with a mental illness that person was judged to be the least responsible of the vignettes for their problems, the person with a dual diagnosis was judged to be somewhat more responsible for their current problems, and the person with a substance use disorder was judged to be the most responsible for their current problems. The overall
direction in the trend of the responses to the three vignettes was in the direction that was hypothesised.

**Controllability**

A large significant effect was found for the differences in the attributions of controllability made towards the vignettes Wilks’ Lambda = .516 $F(2, 26) = 12.182, p < 0.000$, partial Eta squared = .484. Table 4 and Figure 2 show that the mental illness vignette and the dual diagnosis vignette were judged to have similar levels of controllability, but the substance use disorder vignette was judged to have higher levels of controllability. The difference was significant between the mental illness and substance use vignettes (mean difference -1.393, sd .297, $p < 0.001$); and between the dual diagnosis and the substance use disorder vignette (mean difference -1.036, std error .265, $p < 0.002$), and was in the direction hypothesised. No effect was found for the difference between the mental illness and dual diagnosis vignettes (mean difference -.357).

**Stability**

A moderate significant effect was found for the differences in the attributions of stability made towards the vignettes, Wilks’ Lambda = .717 $F(2, 27) = 5.320, p < 0.011$, partial Eta squared = .2833. Table 4 and Figure 2 show that the vignette depicting individuals with mental illness was judged to have similar levels of problem stability to those of the dual diagnosis (mean difference 0.034) and the substance use disorder (mean difference .448). The substance use disorder vignette was judged to be significantly more stable than the dual diagnosis vignette (mean difference -.414, std error .136, $p < 0.015$).
Treatment Efficacy

A large significant effect was found for the differences in the attributions of treatment efficacy made towards the vignettes, Wilks’ Lambda = .297, F(2, 26) = 30.810, p < 0.000, partial Eta squared = .703. Table 4 and Figure 2 show that clinicians judged that their service would be most effective providing treatment to an individual with a mental illness, would be somewhat less effective providing treatment to a person with a dual diagnosis, and would be least effective providing treatment to a person with a substance use disorder. The differences were significantly different between all the vignettes (mean difference between mental illness and dual diagnosis 1.1 (std error .208, p < .000); mean difference between mental illness and substance use disorder 2.0 (std error .254, p < .000); mean difference between dual diagnosis and substance use disorder .93 (std error .192, p < .000). The differences and the overall direction in the trend of the responses to the three vignettes were in the direction that was hypothesised.

Anger

A significant effect was found for the differences in the attributions of anger towards the vignettes. The differences were statistically significantly different the mental illness and dual diagnosis vignettes $X^2 (1, N=29) = 13.0, p < 0.001$; and between the mental illness and substance use disorder vignette $X^2 (1, N=29) = 11.0, p < 0.001$; but were not significantly different between the dual diagnosis and substance use disorder vignettes (mean difference .138).

Sympathy

A moderate significant effect was found for the differences in the attributions of stability made towards the vignettes Wilks’ Lambda = .582, F(2, 27) = 9.679, p<
0.001, partial Eta squared = .418. The differences were significant between the mental illness and dual diagnosis vignettes (mean difference .690, std error .173, \( p < .001 \)) and between the mental illness and substance use disorder vignette (mean difference 1.103, std error .269, \( p < .001 \)); but were not significantly different between the dual diagnosis and substance use disorder vignettes (mean difference .414). Table 4 and Figure 2 show that clinicians felt least anger towards the vignette depicting an individual with a mental illness, higher levels of anger towards the person with a dual diagnosis and most anger towards the person with a substance use disorder. The direction in the trend of the responses was in the direction that was hypothesised.

**Hours Allocated**

No significant difference was found in the distribution of the allocation of the 30 available clinical hours, Wilks’ Lambda = .792 \( F(2, 23) = 3.024, p < 0.068 \), partial Eta squared = .208. This was surprising, both given prior research studies, and in consideration of the fact that the substance use disorder vignette was not judged to meet the criteria for service entry at the service in which this research was conducted.

One possible explanation for this finding is that 13 of the respondents simply allocated 10 hours to each vignette, suggesting that they were possibly not considering differences between the vignettes, and / or not considering their real clinical setting when making the allocation. 3 participants did not respond to this question, leaving 15 participants who did vary their allocation of hours. In an additional investigation of responses to this variable an ANOVA and pairwise comparison of all possible pairs using the Bonferroni multiple comparison tests was conducted on these 15 responses. This revealed a large significant effect, Walks lambda = .523 \( F(2,11) = 5.013, p < 0.028 \), partial Eta squared = .477, with mean hour allocations of 14 hours for the
mental health disorder vignette, 10.5 hours for the dual diagnosis vignette, and 5.5 hours for the substance use disorder vignette. There was a significant difference between the hours allocated for the mental health and substance use disorder vignette (mean difference 8.54, sig .020) but no significant difference between the other variables. Given the small sample size at this point the less stringent LSD comparison test was then also applied, which found the Wilks lambda was also .523, $F (2, 11) = .5013, p<0.28$, partial eta squared = .477, and found significant between condition variances between the dual diagnosis vignette and the mental health disorder vignette (mean difference 5.08, $p < 0.02$) and between the mental health and substance use disorder vignette (mean difference 8.54, $p < .007$).

The second part of the helping response test for this study was the allocation of a single appointment hypothetically the only one available that day. 83% of participants allocated this appointment to the mental health vignette, 13% allocated it to the dual diagnosis vignette and 4% allocated it to the substance use disorder vignette.

**Correlational Analysis**

The second part of this study hypothesised that attributions of responsibility, stability, controllability and treatment efficacy would mediate affective responses, which would in turn mediate helping responses.

Results of the current study were as follows:
**Table 6. Mental Illness Vignette – Between Variable Correlations**

<table>
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<tr>
<th></th>
<th>Respon</th>
<th>Control</th>
<th>Stable</th>
<th>Treatment</th>
<th>Anger</th>
<th>Sympathy</th>
<th>Hours</th>
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**Correlation is significant at the 0.001 level (2-tailed)**

* Correlation is significant at the 0.05 level (2-tailed)

# Spearman’s correlations were used with the anger and responsibility variables
Figure 3. Significant Correlations Between Attributions Within Condition: Mental Illness

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<td>.46* ↑</td>
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<tr>
<td>Responsibility</td>
<td>-.43* ↔ Sympathy</td>
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<tr>
<td>.55** ↑</td>
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</tr>
<tr>
<td>Control</td>
<td>-.38* ↔ Treatment Efficacy</td>
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</table>

** Correlation is significant at the 0.001 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Spearman’s correlations was used for the anger variable

Figure 3 shows that analysis using the Pearson product-moment correlation coefficient and Spearman Rho found moderate statistically significant correlations between responsibility and stability ($r=.46$), found that responsibility and sympathy were negatively related ($r=-.43$), controllability and treatment efficacy were negatively related ($r=-.38$) and stability and anger were correlated ($r=.37$). A large statistically significant correlation was found between responsibility and controllability ($r=.55$). No other correlations reached statistical significance.
Table 7. Dual Diagnosis Vignette – Between Variable Correlations

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<th></th>
<th>Respon</th>
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<th>Stable</th>
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<th>Anger</th>
<th>Sympathy</th>
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</tbody>
</table>

** Correlation is significant at the 0.001 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

# Spearman's correlations were used with the anger variable
**Figure 4.** Significant Correlations Between Attributions Within Condition: Dual Diagnosis

|                  | Correlation |  |                  | Correlation |  |
|------------------|-------------|  |                  |-------------|  |
| Responsibility   | .44*        |  | Anger            |             |  |
| .83** †          |             |  |                  | -.46* †     |  |
| Control          | .43*        |  | Sympathy         |             |  |
| Treatment Efficacy | .39*      |  |                  |             |  |
| Responsibility   | -.46*       |  | hours allocated  |             |  |

**Correlation is significant at the 0.001 level (2-tailed)**

**Correlation is significant at the 0.05 level (2-tailed)**

Spearman’s correlations were used with the anger variable

Figure 4 shows that analysis using the Pearson product-moment correlation coefficient and Spearman Rho found moderate statistically significant correlations between responsibility and anger ($r=.44$), controllability and anger ($r=.43$), treatment efficacy and sympathy ($r=.39$), and a moderate negative correlation was found between responsibility and hours allocated ($r=-.46$). A large statistically significant correlations was found between responsibility and controllability ($r=.83$).
Table 8. Substance Use Disorder Vignette – Between Variable Correlations

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<tr>
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<th>Respon</th>
<th>Control</th>
<th>Stable</th>
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** Correlation is significant at the 0.001 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

# Spearman’s correlations were used with the anger variable
As illustrated by Table 8 and Figure 5, a correlational analysis of within condition responses to the substance use disorder vignette found large statistical significantly correlations between responsibility and controllability \((r=.74)\), treatment efficacy was negatively related to anger \((r=-.50)\), treatment efficacy was related to sympathy \((r=.52)\), and a moderate correlation was found between treatment efficacy and hours allocated \((r=.44)\).

The strength of the correlations found in this study are of similar sizes to the findings of Rudolph et al.'s 2004 meta-analysis of help giving. This found significant
over-all weighted correlations between controllability and sympathy of -.45, controllability and anger of .52, and controllability and help of -.25. Correlations between sympathy and help are shown to vary between .25 and .79, correlations between anger and help are shown to vary between -.01 and -.71 and correlations between sympathy and anger are shown to vary between -.03 and -.71.

Due to the small sample size there was insufficient power to conduct multiple regression analysis in order to determine the predictive ability of the independent variables to the dependent variables.

**Discussion**

The current study found that clinicians attributed more responsibility towards a dual diagnosis vignette than a mental health vignette, and this attribution of responsibility was associated with increased anger, and with the number of hours allocated to the dual diagnosis vignette. Clinicians were less optimistic about treating a dual diagnosis vignette, and this attribution was associated with decreased sympathy towards the vignette.

**Effect of Demographic Variables on Responses**

Based on research which has shown that length of drug and alcohol experience, and length of drug and alcohol training is positively associated with improvement in staff optimism and attitudes towards substance using clients, it was thought that a correlation may have been found between these variables and attributional trends, however no such significant correlations were found. It is possible that this may have been due to the lack of power associated with the small sample size, or it may that associations found in other studies are dependent on the nature of the experience and training, details of which were not available in this study.
The current study set out to test the following hypotheses:

**Hypothesis 1.**

That clinicians will attribute more controllability and responsibility, less stability and less belief in treatment efficacy, towards a vignette describing a dual disorder client than towards a vignette describing a client with a mental health disorder only.

Clinicians did not attribute a difference in controllability, did attribute more responsibility, did not attribute a difference in stability, but did attribute less treatment efficacy towards the dual diagnosis vignette than towards the mental health disorder vignette. Therefore this hypothesis was partially supported.

**Responsibility**

The findings that the vignette depicting a dual diagnosis condition was judged to be less responsible than the substance use disorder vignette, but more responsible than the mental health disorder vignette was as hypothesised. It is possible that this finding may be linked to how clinicians view the temporal association of dual disorders, and to beliefs about freedom and intention to act with regards to the use of substances. This is an important finding, as it begins to indicate how this client group is viewed in comparison to other groups, and it has important implications when one considers the attributional research into the implications of different judgments of responsibility. It is in line with other attributional findings about mental health disorders and substance use disorders, and it indicates that the dual diagnosis client is positioned between these two.
Controllability

On this variable the substance use disorder vignette was judged to have higher levels of controllability than the other two vignettes – positioning the dual diagnosis vignette with the mental health vignette in this instance. Thus it would seem possible that clinicians were judging mental illness in general as less controllable than substance use. This is again in line with attributional studies which have found that ‘illicit drug use’ is judged to be more controllable than other conditions (Mackay et al., 2005) and that ‘alcoholism’ is judged to be highly controllable (Weiner, 1995).

Stability

Here the only significant difference was between the dual diagnosis and the substance use disorder vignette. Thus the mental illness and dual diagnosis vignette, and the mental illness and substance use disorder vignette, were judged to have similar stability levels, but the substance use disorder vignette was judged to be more stable than the dual diagnosis vignette. This again appears to suggest that the dual diagnosis vignette is being viewed as more similar to the mental health disorder vignette than the substance use disorder vignette, and that the inclusion of substance use in the dual diagnosis vignette is not impacting on judgments of stability.

Treatment efficacy

The clinicians who participated in this study felt most treatment optimism towards the mental health disorder vignette, less treatment optimism towards the dual diagnosis vignette and least towards the substance use disorder vignette. This is
understandable; given that the mental health vignette depicted the traditional client that the majority of these clinicians were trained to, and expect to, work with. Only 62% of respondents had training in working with substance use disorders, and of this 62%, 67% of these had less than 40 hours training. It is suggested that this lack of training in working with substance use disorders would also impact on efficacy towards dual diagnosis clients, and the fact that the dual diagnosis vignette was positioned between the two other vignettes perhaps reflects the clinician's confidence in working with the mental health disorder component, but lower confidence in working with the substance use component.

**Hypothesis 2.**

2. That clinician affective responses towards a vignette describing a dual disorder client will show more anger and annoyance, and less sympathy, than towards a vignette describing a client with a mental health disorder only.

Statistically significant support was found for this hypothesis.

**Hypothesis 4.**

That clinicians affective responses towards a vignette describing a substance use disorder client will show more anger and annoyance, and less sympathy, than towards a vignette describing a client with a mental health disorder.

Statistically significant support was found for this hypothesis.

On the anger and sympathy variables the responses indicated differences between the mental illness vignette and the other two vignettes, but no differences between the dual diagnosis vignette and the substance use disorder vignette, suggesting that these two were positioned together. Thus although attributional
judgements positioned the dual diagnosis vignette either between the mental health disorder and substance use disorder vignette, or positioned them with the mental health vignette, on both the affective variables they were positioned alongside the substance use disorder vignette. This possibly suggests that negative beliefs and attitudes regarding substance use (as found in earlier research) are impacting on affective reactions. This has important implications given research findings that affective attributions are more proximal to helping behaviour than cognitive ones (Rudolph, et al., 2004).

**Hypothesis 3.**

3. That clinicians will allocate less time and resources to a vignette describing a dual disorder client than towards a vignette describing a client with a mental health disorder only.

Statistically significant support was not found for this hypothesis.

**Hypothesis 5.**

That clinicians will not allocate any time and resources to a vignette describing a substance use disorder client (as the client will be judged not meeting the criteria for mental health services).

Statistically significant support was not found for this hypothesis.

No significant difference was found in the distribution of the allocation of the 30 available clinical hours. This was surprising, both given prior research studies, and in consideration of the fact that the substance use disorder vignette was not judged by the researcher to meet the criteria for service entry at the service in which this research was conducted. As discussed earlier, further analysis was conducted on
the responses of 15 participants who varied their allocation of hours to this question, and if the second and third analyses are accepted, the mental health disorder vignette was allocated more time than either of the other two conditions. Both this finding and the earlier more conservative finding of no difference in hours, are contrary to dual diagnosis research which suggests that dual diagnosis clients require more time over a longer period of time than non-dual diagnosis clients.

Anecdotally it would seem that clinicians are aware that dual diagnosis clients require more time than other clients, as this is a complaint often heard about this client group, so it is possible that this hour allocation is based on something other than clinical experience.

The second part of the helping response test for this study was the allocation of a single appointment (hypothetically the only one available that day). The majority of participants (83%) allocated this appointment to the mental health disorder vignette, 13% allocated it to the dual diagnosis vignette and 4% allocated it to the substance use disorder vignette. The allocation of a single available appointment was designed not only to measure resource allocation, but also to measure clinician’s estimation of urgency of requirement of services for each of the vignettes.

As presented earlier, actuarial risk assessment research (Johns, 1997) would suggest that a client presenting with a dual psychotic and substance use disorder is higher risk than a client with a single psychotic mental health disorder, and therefore in terms of risk management would be the client for whom a single available appointment would be made. (Of course this forced choice is artificial, in reality it is assumed that if two clients presented with high risk and/or need on the same day
triage and/or psychiatric emergency staff would assess and respond to this need as required. However in order to simulate realistic varied referrals, the three vignettes differed substantially in presentation, and for the question of resource allocation and risk assessment to be investigated with any confidence the vignettes would need to be standardised (for example a vignette for the mental health disorder, a vignette for the substance use disorder, and the identical vignettes combined for the dual diagnosis disorder). Given the importance of risk management, the findings of the current study suggest that it would be useful to research clinicians risk assessment of dual diagnosis clients further.

Overall the responses to the two questions requiring resource allocation indicated that there was possibly (depending on which analysis is accepted) a tendency to allocate more resources to the mental health disorder vignette, however actuarial research would suggest that the dual diagnosis vignette is the client who is likely to require more services, more urgently, than the non dual diagnosis clients.

**Weiner's Theory of Social Conduct**

**Hypothesis:** That attributions of responsibility, stability, controllability and treatment efficacy would mediate affective responses of anger and sympathy, which would in turn mediate helping responses such as allocation of clinical hours and allocation of a single available appointment.

Two of the three vignettes supported the first step of this hypothesis, none of the vignettes supported the second step.

This hypothesis was investigated using correlational analysis, which is strongly influenced by sample size. Given the small sample size obtained in this study it is possible that there was insufficient power to detect some significant correlations.
Each condition was analysed separately to assess the correlations between each of the variables, and it was beyond the scope of this study to analyse significant correlations in between condition variables. The correlational results for each of the three conditions were markedly different, so they will each be discussed in turn.

All three conditions showed large correlations between responsibility and controllability. This is in line with other attributional studies (Weiner, 1995), some of which do not distinguish between these two variables. Therefore in subsequent discussion these two variables will be used together.

**Mental Illness Vignette**

Looking at the help giving model postulated by Rudolph, Roesch, Greitemeyer, and Weiner (2004) correlations were found which offered support to the first step of the attributional affective help giving model.

Overall analysis of correlations showed that for the mental health vignette the more responsible and controllable clinicians judged the condition to be, the less sympathetic and optimistic they felt. Additionally the more they judged the client in the vignette as responsible for their condition the more stable they felt they were, and the more stability the more angry they felt towards the vignette. This is consistent with other attributional research and supports the suggestion that attributions impact on affective reactions. The correlation between controllability and treatment optimism is in line with the findings of Sharrock et al. (1990), who postulate that this finding may mean that controllability is seen as a sign of intentionality, and that if the behaviour is judged controllable by the client, it is seen as less controllable by the staff. This may also explain the correlation with affective reactions, as negative behaviour viewed as intentional tends to gain less positive affective reactions.
**Dual Diagnosis Vignette**

Overall analysis of correlations showed that for the dual diagnosis vignette the more responsible and controllable clinicians judged the condition to be the more anger they felt, and the fewer hours they allocated.

The association between responsibility and controllability and anger was also found in the staff helping behaviour studies of McKay et al. (2005) and Stanley & Standen (2000). Analysis in the current study showed increased anger resulted in decreased sympathy, and that the more optimistic the clinicians felt about the vignette’s treatment the more sympathetic they felt. Therefore for this vignette although the allocation of hours was not mediated by the affective reaction as hypothesised by the theory of social conduct, more negative affective reactions were present, and allocation of clinical time was related to attributions made about how responsible/ controllable this client was for their problems. The absence of correlation between affective reactions and professional helping behaviour is similar to the findings of Sharrock et al. (1990).

This is the key finding of this study as it provides a possible explanation about one aspect of the negative attitudes previous research has found clinicians have towards dual diagnosis clients. Clinicians affective reactions being linked with responsibility attributions suggest that clinicians are judging dual diagnosis as higher in internal causality than mental health disorders, presumably due to beliefs about the use of substances, and that this impacts on affective reactions in a manner perhaps reminiscent of the just world hypothesis attribution error.

It is suggested that these findings may also be important in light of the emotional expression literature, as it seems reasonable to infer that if anger /
annoyance or inferences of responsibility are in any way evident to clients at any time they may impact negatively on outcomes.

**Substance Use Disorder Vignette**

No correlations supportive of the Rudolph, Roesch, Greitemeyer, & Weiner (2004) model were found for this vignette.

Treatment optimism was the variable that best explained responses within the substance use disorder vignette. This is in line with other attributional studies which have found that treatment optimism is a better mediator of helping responses than affective responses (Dagnan et al., 1998; Sharrock et al., 1990). Correlational analysis of the current study showed as estimation of treatment optimism increased, anger decreased, sympathy increased, and hours allocated increased. This suggests that clinicians attitudes towards working with a vignette of a client depicted with a substance use disorder was related to how effective they felt their treatment of this client would be, and that this estimation of effectiveness not only mediated their affective response, but also impacted on the allocation of resources.

**Limitations**

There were a number of limitations in the methodology of this study, and the results discussed need to be considered in the context of these limitations. These included the small sample size; the limitations of generalising results from one small study; the fact that there was no control of response sets by variance in the order of presentation of the vignettes; the artificialness of vignettes depicting only one particular set of symptoms; the forced attributions; the fact that although the questionnaire was based on similar ones used in attribution research it’s reliability and validity was not known; and the possible impact of social desirability upon the participants. The questions designed to measure help giving in this questionnaire did
not work well, with the many participants responding to the first question by simply splitting the 30 available hours 10 hours each way, and the second question providing a percentage results which did not lend itself to the ANOVA and correlations analysis. It is possibly due to the limitations in these questions that no support was found for the help allocation step of Weiner's theory of social conduct.

Despite these limitations it is suggested that this study did find some important and interesting differences in the way that clinicians respond to mental health disorder, dual diagnosis and substance use disorder vignettes, and offered some possible explanations for some of these differences.

**Recommendations**

Given that this study found that clinicians did attribute more responsibility towards a dual diagnosis vignette than a mental health disorder vignette, that this attribution of responsibility was associated with increased anger towards the dual diagnosis vignette, and was associated with the number of hours allocated to the dual diagnosis vignette, it is suggested that efforts should be made to modify these attributions.

Although recent research into reducing stigmatisation has moved away from recommending changing causal beliefs as a method of destigmatisation, and instead recommends positive contact as a method of change, it is suggested that a combination of upskilling and supporting clinicians who work with dual diagnosis clients so that their client contact is positive; combined with addressing causal beliefs by the promotion of a biopsychosocial model such as the one suggested by Todd et al. (1998) may be effective in producing attributional changes. Additionally adoption of an evidence based biopsychosocial model of assessment and treatment throughout
mainstream services is likely to improve different services ability to communicate and work together in providing integrated services to dual diagnosis clients, and therefore is likely to reduce barriers to care, and gaps in services.

This study also found that clinicians were less optimistic about treating a dual diagnosis vignette, and this attribution was associated with decreased sympathy towards the vignette. Therefore it is recommended that clinicians working with dual diagnosis clients require confidence in their ability to help these clients, which again indicates the need for specific training in the biopsychosocial assessment and treatment of this specific client group. It also indicates a need for good, regular professional supervision, from a professional skilled in working with dual diagnosis and skilled in identifying and working with countertransference; and the need for support for, and recognition of, the important role dual diagnosis clinicians play in working with this sometimes challenging client base. As discussed earlier training has been shown to be related to increased treatment optimism and improved attitudes towards dual diagnosis clients, a finding possibly related to socially based beliefs being replaced with clinical knowledge and increased clinical confidence.

These recommendations are very similar to some of those of in the national clinical guidelines produced by Todd et al. (1998).

Further research is recommended into the area of staff attributions towards dual diagnosis clients. It is suggested that it would be useful to replicate the current study with a better design with regard to the helping responses questions in order to further investigate the impact attributions have on the helping response. It is also recommended that research be conducted investigating the area of risk assessment and resource allocation with dual diagnosis clients.
References


*National Household Survey on Drug Abuse.* USA: US Substance Abuse and Mental Health Services Administration.


Todd, F.C., Sellman, J.D. & Robertson, P.J. (1998). *The Assessment and Management of People with Co-Existing Substance Use and Mental Health Disorders.* Wellington: ALAC.


Appendix A

Mad or Bad? The role of staff attributions in dual diagnosis.

INFORMATION SHEET

Study Introduction
The study aims to investigate how mental health clinicians think and feel about working with clients with co-existing mental health and substance use disorders. It is anticipated that this information may be useful in improving training procedures in this area in the future.

This study is being conducted by Jacqui Gregory, B (app) Sc, as partial fulfilment of a Masterate of Science Degree majoring in Psychology. Jacqui’s academic supervisor is Dr Fran Brinn, RN, BSc(Hons), DClinPsy Wales, MNZPsS, Clinical Psychologist/Assistant Lecturer at Massey University, Wellington Campus. Participants are invited to contact the researcher, Jacqui Gregory, on [redacted] or the supervisor, Dr Fran Brinn on 04 8015799 extn 62034 if they have any questions about this project.

Participation
This study uses a short, anonymous questionnaire that will take about 10 – 15 minutes to complete. There are no right or wrong answers to the questions asked – it is your individual response that is of interest. Participation in the study is voluntary and there are no consent forms as completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question. All mental health staff employed in a clinical role are eligible to participate in this research. If you are not employed in a clinical role within mental health services please do not complete this questionnaire.

If you are happy to participate in this study please complete this questionnaire at your own convenience within the next week, and return it to the box provided at your reception area. In order for this research to be able to continue as many responses as possible are needed so your participation would be greatly appreciated.

As a token thank you for contemplating participation in this research you are offered the opportunity to receive a free movie ticket. If you would like to receive a free ticket please put your name and address in the tear off portion at the end of the questionnaire into the second box provided at your reception area. These details will be kept separately from the completed questionnaires and will be destroyed as soon as you have been sent a movie ticket by post.

Questionnaires are completely anonymous and once they are completed and returned they will be stored in a locked filing cabinet in the researcher’s home until the study is complete. They will then be stored in a locked filing cabinet at the Turitea Campus of Massey University for a period of five years, after which they will be destroyed. However it is noted that although this questionnaire is designed to be anonymous, there is a small risk of identification of participants (due to the small number of mental health staff) via the demographic questions participants are asked. These questions have been kept to the minimum required to ensure validity of the research, and have been made as broad as possible to reduce risk of possible identification. Completed questionnaires will be seen by the researcher and academic supervisor only, both of whom are bound by strict ethical confidentiality obligations. No individual responses will be reported in the research findings, only aggregated responses will be reported in this study. A summary of the findings and recommendations of this study will be made available to all participants who request it and will be distributed to Mental Health Team Managers.

THANK YOU FOR YOUR TIME AND HELP WITH THIS STUDY Jacqui Gregory
This project has been reviewed by a Sub-committee of the Massey University Human Ethics Committee Palmerston North Application 05/62. If you have any concerns about the conduct of this research please contact Dr John O’Neill, Chair, Massey University Human Ethics Committee; PN Tel 06 350 5799 x 8635; emailhumanethicspn@massey.ac.nz. This project has also been reviewed by the Northern Y Regional Ethics Committee.
Section One: Demographic Information

Please CIRCLE the following categories that are applicable to you:

1. Gender: Male Female


3. Ethnicity: Maori NZ European Pacific Islander Other

4. Years of experience in mental health work:
   - Under 2 yrs 2-5 yrs 6-10 yrs 11-15 yrs 16-20 yrs Over 20 yrs

5. Do you have any experience working with clients with drug and alcohol problems?
   Yes No

6. If you have experience working with clients with drug and alcohol disorders, how many years experience do you have in this area?
   - Under 2 yrs 2-5 yrs 6-10 yrs 11-15 yrs 15-20 yrs Over 20 yrs

7. Have you had any training in working with clients with drug and alcohol disorders?
   Yes No

8. If you have had training in working with clients with drug and alcohol disorders how many hours training have you had in this area?
   - Under 2 hrs 2-8 hrs 9-24 hrs 25-40 hrs 40-80 hrs Over 80 hrs
## Section Two: Questionnaire

Please circle the number which best corresponds with how you would answer the question in response to the vignettes, on a scale of 1 to 7.

### VIGNETTE X:

In the last 2 years life has changed for X. X believes that people are talking about X, spying on X and that they can hear what X is thinking. Because of this X doesn’t like to leave the house, and as a consequence has lost their job, lost contact with close friends, and with most of X’s family. X was encouraged to come to Mental Health Services by their Grandmother, who is concerned that X is hearing voices that tell X what to do.

1. How much do you think that X is responsible for their current problems?
   
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3. How stable do you think X’s problems are?
   
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4. How effective do you think your services treatment of X’s problems is likely to be?
   
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5. How much anger and annoyance do you feel toward X?
   
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6. How much sympathy do you feel toward X?
   
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VIGNETTE Y:

Y has come to Mental Health Services at the suggestion of an older family member who is concerned about Y. The family believes that Y is hearing voices no-one else can hear, and that Y doesn’t like to leave the house. The family report that although they see little of Y now, they have noticed these behaviours developing over the last several years. They also report that Y has been drinking heavily, and that they suspect Y has been using cannabis and amphetamines.

7. How much do you think that Y is responsible for their current problems?
   1 2 3 4 5 6 7
   Not at all responsible  entirely responsible

8. How much do you think that Y’s problems are controllable by them?
   1 2 3 4 5 6 7
   Not at all controllable  entirely controllable

9. How stable do you think Y’s problems are?
   1 2 3 4 5 6 7
   Not at all stable  very stable

10. How effective do you think your services treatment of Y’s problems is likely to be?
    1 2 3 4 5 6 7
    Not at all effective  very effective

11. How much anger and annoyance do you feel toward Y?
    1 2 3 4 5 6 7
    None  a lot

12. How much sympathy do you feel toward Y?
    1 2 3 4 5 6 7
    None  a lot
VIGNETTE Z:

Z has come to Mental Health Services due to family encouragement due to concerns about Z's drug and alcohol use. Z's family report that they believe that Z drinks heavily and they believe Z has been using cannabis and amphetamines for the last few years. The family also report that Z has ceased going out of the house, and seems to dislike, and avoid, family contact. Z has maintained contact with a few friends, who visit Z at home.

13. How much do you think that Z is responsible for their current problems?
   Not at all entirely
   1 2 3 4 5 6 7 responsible

14. How much do you think that Z's problems are controllable by them?
   Not at all entirely
   1 2 3 4 5 6 7 controllable

15. How stable do you think Z's problems are?
   Not at all very
   1 2 3 4 5 6 7 stable

16. How effective do you think your services treatment of Z's problems is likely to be?
   Not at all very
   1 2 3 4 5 6 7 effective

17. How much anger and annoyance do you feel toward Z?
   None a lot
   1 2 3 4 5 6 7

18. How much sympathy do you feel toward Z?
   None a lot
   1 2 3 4 5 6 7
Now please think about clients X, Y and Z.

19. Please imagine that your work place has 1 new client appointment available today and that clients X, Y & Z are all requesting appointments. Who will you schedule today?

X       Y       Z

20. Please imagine that your work place has 30 hours of clinical time available to allocate towards helping these new clients. How would you allocate this time?

Resources towards helping client X: __________________________
Resources towards helping client Y: __________________________
Resources towards helping client Z: __________________________

NOW PLEASE CHECK YOU HAVE ANSWERED ALL QUESTIONS

Thank you for your time in considering this questionnaire. Please return the questionnaire to the box provided, and if you wish to receive a free movie ticket as thanks for your consideration of this questionnaire, and/or a summary of the project findings, please detach the attached slip, fill in your name and address and enter this slip into the separate box provided.

----------------------Tear off and place in box at reception------------------------

☐ YES please send me a free movie ticket. I understand my details will NOT be kept and will be destroyed as soon as my movie ticket is posted.

☐ YES - I wish to receive a summary of the project findings when it has concluded. I understand my details will NOT be kept and will be destroyed as soon as a summary of the project findings is posted.

Name: __________________________
Address: __________________________
____________________________________

Thank you again for your time in considering this questionnaire.
APPENDIX B

Figure B1. Histogram of Responses to Responsibility Variable.

Figure B2. Histogram of Responses to Controllability Variable.

Figure B3. Histogram of Responses to Stability Variable.
Figure B4. Histogram of Responses to Treatment Efficacy Variable.

Figure B5. Histogram of Responses to Anger/Annoyance Variable.

Figure B6. Histogram of Responses to Sympathy Variable.

Figure B7. Histogram of Responses to Hours Allocated Variable.