The layperson's understanding of mental illness: The folk psychiatry model

Mariam Parker

Department of Psychology

University of Cape Town

Supervisor: Johann Louw

Word Count: Abstract: 300

Main body: 9566

ABSTRACT

The way in which the layperson understands mental illness is important, as the way one conceptualizes psychopathology is often a determining factor in whether or not one seeks treatment, should the need arise. The folk psychiatry model, which posits that mental illness may be understood across four dimensions: pathologizing, moralizing, medicalizing and psychologizing, serves to fill the gap left by the lack of theoretical models in this area of research. However, there is an additional dearth of research testing the model. Thus, the first aim of my study was to test the efficacy of each dimension, as well as the overall efficacy of the model. The second aim was to determine whether performance on each dimension varied across different cases of mental disorders. A third aim was to test differences across race, level of exposure and level of religiosity of participants. Participants were 200 first year psychology students who completed an online questionnaire. In keeping with previous research, support for each of the dimensions was found. However, evidence for the validity of the model as a whole was lacking. Performance on dimensions was dependant on the disorder that was being tested. This indicated that people understand different mental disorders in different ways. A higher level of religiosity was found to be related to moralizing judgements, which indicated that religious people are more likely to understand mental illness in moral terms. In contrast with previous research, no differences were found between different racial groups, which may be attributed to the homogenised sample. Additionally, participants who had not previously been exposed to mental illness did not significantly differ from those who had prior exposure. However, this may be due to the fact that the only disorder that participants were exposed to, that was also included in the study, was bipolar disorder.

Keywords: Mental disorders, layperson's understanding, folk psychiatry model

INTRODUCTION

In psychology, the manner in which health professionals define and categorise disorders is of utmost importance. It is through this process that mental illness can be diagnosed and treated. However, Haslam, Ban and Kaufmann (2007) stated that the way in which the average person defines mental illness is regarded as more important, as this could be a determining factor in the decision to seek therapy, or in the formation of stigma. Jorm et al. (1997) posited the term "mental health literacy" to denote knowledge and beliefs the public hold about mental illness. This knowledge is meant to assist in the recognition, management and prevention of disorders. Inclusive in mental health literacy is the ability to recognise mental disorders, knowledge of how to obtain information, familiarity with risk factors and aetiology, and knowledge of available treatments and attitudes that aid recognition and help seeking. The current project deals exclusively with recognition of mental illness and perceptions of aetiology as representations of the way in which the layperson understands mental disorders. The layperson is defined as anyone without extensive psychological training (with particular reference to training in psychopathology).

Recognition of mental illness

Some work on perceptions of mental illness has centred on recognition of disorders alone. Most studies only used vignettes of depression and schizophrenia to ascertain the ability of the public to recognise mental illness. The exception is the study by Link, Phelan, Bresnahan, Stueve, and Pescosolido (1999), which used the additional cases of alcoholism, and drug abuse to test recognition of disorders. Studies in this arena had quite representative populations of adults, as they tended to use respondents to national surveys in a variety of countries, including Switzerland, Australia and America. Most studies contained questions pertaining to the degree to which the participant believed certain cases to be representative of mental illness. Link et al. (1999) furthermore asked participants if the person described in the vignette was likely to have the specific disorder, for example, "How likely do you think it is that [NAME] is experiencing schizophrenia?" (pp. 1330). Key among results found in these studies is that schizophrenia is recognised as pathological far more often than depression or any other disorder (Lauber, Nordt, Falcato & Rössler, 2003; Link et al., 1999; Jorm et al., 1997). Recognition of schizophrenia over other disorders demonstrates that schizophrenia is seen as abnormal and rare more so than more familiar disorders such as alcoholism and

depression. Therefore, it could be reasoned that rare situations are more likely to be seen as pathological. In contrast, however, exposure to depression is correlated with its recognition (Lauber et al., 2003). Thus, people who, for example, had a family member, friend, or acquaintance who had depression, were more prone to recognise the symptoms of the disorder in a vignette. Further evidence demonstrates the dramatic increase of identification of depression, and to a lesser extent, of schizophrenia between 1995 and 2004, which indicates a shift in perception of mental disorders (Jorm, Christensen & Griffiths, 2005). The studies that deal with recognition of disorders are limited in that they only test for identification of relatively known disorders. Depression, schizophrenia and substance abuse have been present in popular culture recently. Considering that exposure to depression increases the likelihood of its recognition, exposure (in this case through popular culture) to other disorders, by the same principle, may increase the likelihood of the recognition of these disorders. Recognition of these, well known disorders in research does not necessarily delineate a thorough understanding of the broad umbrella of mental illness, inclusive of disorders that the public often has no exposure to.

Aetiology of mental illness

Public perception of aetiology of mental illness falls under three broad themes. These themes emerge from research and can be classified as moral, environmental and biological causes of mental illness. Each of these themes has found adequate support in past research, and is instrumental in theorizing the layperson's understanding of mental illness. Below is a discussion of each category, with supporting research, and descriptions of differences in perception between groups.

Moral causes of mental illness

The first theme emerging from research on public perceptions of mental illness pertains to the belief that psychopathology has a moral aetiology. Beliefs under this theme may include perceptions of personal failings or weaknesses, and religious and supernatural causal attributions. These perceptions are strongly affected by culture and race. For instance, Japanese people were more likely than Australians to endorse weakness of character as a cause of mental illness. A possible explanation for this disparity could be that Japanese culture is especially focused on control and success, where weakness is associated with failure (Nakane et al., 2005). Additionally, Black Americans were more likely than White Americans to endorse bad character (a moral attribution) than genetic factors as a cause of

mental illness, which could relate to reactions against racist arguments that were based on genetic reasons (Shnittker, Freese, & Powell, 2000). In another example, Nathan, Wylie, and Marsella (2001) found that Japanese-Americans in Hawaii had significantly higher scores pertaining to religious and spiritual issues as well as supernatural phenomena as causes of mental illness, than any of the other ethnic groups they tested.

Religious beliefs were also strong predictors of religious causal attributions for depression and schizophrenia among Protestants in Australia (Hartog & Gow, 2005). Over a third of these participants further believed that demonic possession caused both disorders. Relatedly, a marginal number of Turkish immigrants in Australia believed that mental illness had supernatural causes, such as magical causation and fate. This could be related to the religious beliefs of the participants, as certain cultures and religions have more defined sets of supernatural beliefs (Minas, Klimidis, and Tuncer, 2007).

A further factor impacting on endorsement of supernatural causes is the type of illness presented to participants. In Ethiopia, schizophrenia and mental retardation were thought to be caused by supernatural elements far more than alcoholism and depression (Mulatu, 1999). Thus it becomes apparent that the belief in religious and supernatural factors as aetiological determinants of mental disorders could be largely influenced by the type or perceived severity of the disorder.

Environmental causes of mental illness

The second theme of aetiological beliefs of mental disorders appearing in research, relates to beliefs that psychopathology occurs as a result of the impact of both past and present situational factors. These factors include day to day environmental, or psychosocial stressors as well as the way the person was raised (Schnittker et al., 2000). Other related possible causal factors are relationships, family, overworking, poverty, poor health, substance abuse, reduced self-confidence (Nathan et al., 2001), grief, childhood problems and trauma (Nakane et al., 2005).

Research shows support for understanding mental illness in terms of environmental causes, as far back as 1963. Manis et al. (1963) found that patients in psychiatric hospitals believed environmental factors to be the cause of their pathology. Beliefs about environmental causation of mental illness continue to be strongly supported. Stress was named the strongest cause of mental disorders by mentally ill patients in Hawaii (Nathan et al., 2001). Additionally, the public tends to endorse psychological factors such as stress as opposed to biological causes of mental illness (Jorm, 2000; Read & Harré, 2001).

Although both Western and Non-Western cultures support environmental aetiological beliefs of mental disorders, there are variations in perceptions. For example, environmental factors were considered to be strongly causally related to mental disorders in both Australia and Japan (Nakane et al., 2005). However, Australians associated poverty with risk for depression, whereas Japanese believed that poverty was associated with lower risk for both depression and schizophrenia. There are also some racial differences in environmental causal attributions of mental illness. However, evidence in this respect contains disparities. There were no differences between attributions of life stressors as causes of depression between Black and White Americans. Nevertheless, White Americans were more likely to support upbringing as a causal factor of mental illness than Black Americans were.

Attributions of environmental causes may also be dependent on the disorder participants are presented with. For example, depression, anxiety, alcoholism and schizophrenia were thought to have more psychosocial causes than mental retardation, and mental retardation and schizophrenia were thought to be caused by socio-environmental deprivation more than anxiety disorders, depression and alcoholism (Mulatu, 1999). Thus, as with moral causes of mental illness, the type of disorder affects the perception of mental illness.

Biological causation of mental illness

The final theme that research has identified concerns biological beliefs about mental disorders. Features in this category include perceptions of mental illness either as a physical illness or defect, or as an expression of an essence. There is much evidence to support the view that laypeople perceive mental disorders in biological terms. For example, Turkish immigrants in Australia believed predominantly in natural causes, such as infection or organ deterioration, as causes of mental and physical illness (Minas et al., 2007). This indicates a belief in the biological model. Relatedly, many people understand mental illness in terms of essences. Essentialist beliefs occur when people take social categories as attributable to unchanging properties; consisting of certain distinct elements, including the belief that the disorder is fixed, and cannot change. Other beliefs are that the disorder is inherent within the person; all people who have the disorder are homogenous and traits can be generalised to the whole group, as there are no individual differences between them. Finally, the disorder has very distinct features that are natural as opposed to socially constructed, which places them beyond language and culture and deems them universal. Thus, for people who hold

essentialist beliefs, normality does not have to be measured in the context of culture (Haslam & Ernst, 2002).

Several studies validate essentialist beliefs as a mode of grappling with mental illness. For example, Cumming and Cumming, cited in Rabkin (1972), found that people in a small community in Canada could not accept the idea that normal and abnormal behaviour exists on a continuum as opposed to being exclusive categories. These participants could not comprehend that one person may have both normal and abnormal characteristics. Ideas seem to have changed since 1972, as recent studies have found mixed evidence of essentialism. Haslam and Ernst. (2002), found that people tend to draw essentialist inferences about mental disorders in response to the information they are given. Essentialist thinking was found to be an important aspect of the way in which laypeople think about mental disorders. However, as participants only responded in particular ways to particular manipulations, we cannot conclude that essentialism is evident in all their mental illness beliefs. This compromises the validity of essentialist beliefs, as they are characterized as "all or nothing" types of thoughts.

Partly contrary to and partly consistent with these results are the findings that both experts and novices believed that mental disorders are created by professionals as opposed to existing naturally. Additionally, novices did not believe that mental disorders have all-or-nothing membership. However, they believed that mental disorders have unique features that define them, as well as causal essences (Ahn, Flanagan, Marsh, & Sainslow, 2006). Both Ahn et al. (2006), and Haslam and Ernst, (2002) had small samples (both under 60 participants) that consisted primarily of White participants, which would make the results very specific to the groups they were measuring. Generalization of results to the population at large would therefore be difficult.

Part of the reason that essentialism studies yielded mixed evidence, is that people are more likely to endorse a biological basis of disorders for some disorders and not for others. As Schnittker et al. (2000) noted, the causes attributed to the illness are strongly dependent on the illness; mental health beliefs are not constant over all conditions. For example, alcoholism and drug abuse are not seen as much as diseases as schizophrenia and depression are (Link et al., 1999). When mental disorders are viewed as a group, mixed results occur, such as the belief in the mixture of life stressors and chemical imbalances or genetic predisposition as causes (Link et al., 1999).

Once again, race and culture affected attribution of biological factors as causes for mental illness. For instance, Schnittker et al. (2000) found that Black Americans were less likely than White Americans to attribute the cause of mental disorders to genetic factors.

However, Black people did not reject chemical imbalances as a cause. The reluctance of Black participants to believe that genetics causes mental disorders could be due to the fact that much of the historical discrimination against Black people was based on the belief that they are genetically inferior (Schnittker et al., 2000). Similarly, Australians were more likely than Japanese to endorse biological causes for mental illness (Nakane et al., 2005).

Theoretical Models

Most studies test multiple aspects of understanding, particularly testing both environmental and genetic factors. Common threads in these aspects are the impact of race and culture, and the differences in type of causal understanding between different types of disorders. However, these studies still lack sound theoretical models that tie different aspects together. One theory that attempts to explain the layperson's understanding of mental illness, by integrating the range of themes posited, is the folk psychiatry model, proposed by Haslam et al. (2007).

The folk psychiatry model

The folk psychiatry model consists of four dimensions, namely, pathologizing, moralising, psychologizing and medicalizing. The dimensions each have discernable features. However, particular features are pertinent to more than one dimension of the model. Although much of the research described above, as well as several other studies have been used to provide evidence for the efficacy of the model, no studies, as of yet, have attempted to integrate all of the dimensions into a comprehensive test. The dimensions of the model are described below. The domains explain understanding mental illness not only in terms of causal beliefs, but also in terms of the way in which the average person conceptualizes and understands mental illness.

Pathologizing

Pathologizing is used to define behaviour or experience that is abnormal, and forms the first dimension in the folk psychiatry model. Four cognitive processes underlie pathologizing. Firstly, the behaviour is considered deviant from the norm. Secondly, the behaviour is difficult to comprehend. Thirdly, an internal locus of pathology is assumed, and finally there exists a normal, complete person with whom the abnormal person may be compared and judged deviant. Once the behaviour has been pathologized, it is either moralized, medicalized, or psychologized, which constitute the next three dimensions on the folk

psychiatry model (Haslam et al., 2007). Studies that have tested the relevance of the pathologizing dimension are few and far between. Instead of examining whether people judged behaviour to be abnormal, most studies explored whether or not people could recognise particular disorders. According to the pathologizing dimension however, the person's ability to *label* the disorder as pathological is far more important than them being able to name the disorder (Haslam et al., 2007).

Moralizing

Moralizing, the second dimension of the folk psychiatry model, refers to holding the abnormal person morally responsible for their behaviour, (Haslam et al., 2007) and corresponds with the moral theme appearing in research. The actions of the abnormal person are seen as intentional and immoral. Moralizing posits that a person be held accountable for their actions, as well as the consequences of their behaviour. Behaviour may be interpreted as a result of bad intentions, lack of restraint or willpower. Behaviour may also be viewed as sinful, criminal, or depraved (Haslam et al., 2007). Religious beliefs also fall into the moralizing domain, as most religions encompass aspects of accountability and punishment, which are both important attributions within this dimension.

Supernatural causes may only be partly relevant to the moral dimension, due to the fact that supernatural causation implies a lessened degree of responsibility. On the other hand, it could be that supernatural causation could be seen as a result of past misdeeds. That is, the person is being punished for past behaviour with mental illness, which situates perceptions of supernatural causes squarely on the moral dimension.

Psychologizing

The third dimension on the model is psychologizing, which explains behaviour in terms of conscious and unconscious, and rational and irrational mental and emotional states. This dimension corresponds with the environmental causal theme in research. The psychologizing explanation for behaviour appeals to mental states in the form of emotional states, motives and unconscious cognitions. These mental states refer to past circumstances and events, and long-lasting traits that affect current behaviour. Behaviour is understood in terms of past experience, and is thus not completely intentional (Haslam et al., 2007). Environmental and social factors as causes of mental illness fit into this domain.

Medicalizing

The medicalizing domain, the final dimension of the model, views the abnormal person as ill, or diseased, and corresponds with the biological theme in the literature. The behaviour of the abnormal person therefore, in contrast to the moralizing dimension, is viewed as outside of the realm of their control. Abnormality is attributed to biological causes and behaviour is seen as unintentional. Medicalizing beliefs are thought to be based on essentialist thinking, as this type of thinking refers to disorders as belonging to a distinct biological category that is not socially shaped (Haslam et al, 2007).

Rationale and Specific Aims

The studies reviewed above were conducted in several countries, but no research on this matter has been performed in South Africa. Most studies used depression, schizophrenia, and substance abuse as representative for all mental disorders, despite evidence suggesting that understanding of mental illness differs depending on the disorder. There are no studies that simultaneously test all the dimensions of the folk psychiatry model, and their relation to each other, as the model is still relatively new.

The first aim of this project, therefore, was to test the folk psychiatry model within the South African context. Efficacy of the model encompassed finding sufficient support for each of the dimensions. Haslam et al. (2007) noted that in order for mental illness to be understood, it must first be pathologized. Therefore, the relationship between pathologizing and the other dimensions was explored. Additionally, considering that the model proposes to have dimensions that are to some extent interrelated, the relationship between these dimensions was also investigated.

Haslam et al. (2007) has suggested that understanding of mental illness (on the dimensions of the model) differs according to the type of disorder under examination. Prior research supported this notion. Thus, the second aim of the project was to explore this concept further.

Research has suggested further links between race and understanding of mental illness across dimensions, and the next aim of the study was to ascertain whether there were racial differences among the scores on the dimensions in South Africa.

Prior exposure to mental illness has been connected to the increased ability to pathologize behaviour. Thus the fourth aim of the study was to determine whether exposure to metal illness had any bearing on the ability of participants to pathologize behaviour.

Finally, the level of religiosity has been related to moralizing judgements of behaviour. Therefore, the final aim of this study was to ascertain whether this link exists.

METHOD

Participants

The participants were 200 first year psychology students, who completed the questionnaire in the first week of the second semester, (before they were taught the psychopathology module). Although 217 responses were accepted by the survey site used, the present study only had ethical approval for 200 participants. Thus, after three responses were excluded on the basis of incomplete information, the first 200 responses were analysed. Convenience sampling methods were used to recruit participants. Psychology undergraduates were easily available, as they could be recruited through the Student Research Participation Program (SRPP). Due to the sampling procedure, however, the distribution of the participants over racial groups was extremely unequal. Due to the unequal group sizes, and the fact that the Indian racial group are also considered Asian, these groups were combined. The distribution of race, therefore, was 33 Black, 110 White, 39 Coloured, 12 Asian, and six not otherwise specified participants. As non-specified race does not constitute a racial group, it was not included in the analysis of race effects. The four races were included because they are representative of past Apartheid classifications that are still used for classification purposes in South Africa today. Gender was also unequally distributed, with 151 female and 49 male participants. The majority (41.5%) of the participants were 19 years of age. Age ranged between 18 and 27 years, with a mean age of 19.09. Thus participants were part of the same cohort, and comparisons with regard to age may have been insignificant. Undergraduates also had the intellectual ability to understand the cases that were given to them (which were adapted from abnormal psychology textbooks), as well as enough interest in the topic to provoke careful consideration of the questions. Further, they were assumed to have a basic understanding of English, so that translations were not necessary. Only first years were used due to the assumption that learning about psychopathology influences the

way that people think about mental disorders. Based on this assumption, therefore, second and third year students would in all likelihood have a higher mental health literacy, and comparison would become problematic. The only specifications that were necessary were that the participant was over 18 years of age (so as to make informed consent easier) and that participants were first year students. Recruitment consisted of an announcement (See Appendix A) on the UCT student interactive internet site, Vula. This announcement contained a brief description of the study, indications of how much time students would have to spend to complete the study, and the points that the student would earn for their SRPP requirements. Finally, the announcement contained a link that would navigate the student to the questionnaire.

Measures

Questionnaire

The dimensions of the folk psychiatry model have never been tested together before. Previous tests have found support for particular dimensions, but no exhaustive questionnaire has been constructed. The questionnaire used in this study was adapted from a variety of sources in order to capture the dimensions of the model (as described by Haslam et al., 2007) as closely as possible. Items were adapted from the *Explanatory Models of Illness Questionnaire* developed by Minas et al. (2007), descriptions of the folk psychiatry model in Haslam et al. (2007), as well as items from Haslam and Giosan (2002), Link et al. (1999), Schnittker et al. (2000), Manis et al. (1963), Haslam and Ernst (2002), Read and Harre (2001), and Nathan et al. (2001). The questionnaire followed the same format as those from which it was adapted, (that is vignettes followed by Likert-type questions). Many of the items were the same, with additional items constructed in the same style, and along the same dimensions. Comparisons on particular items between the current project and previous work were therefore plausible.

The questionnaire consisted of six vignettes (see below), each followed by a series of questions. There were 32 items, which were repeated for each vignette condition. Of these, seven related to the pathologizing dimension, nine items related to moralizing, nine items related to psychologizing and eight items related to medicalizing (including four items regarding essentialist beliefs). Items appeared in a different random order in each vignette

condition, so as to ensure a reduction in response set. Randomization was ensured by the use of the random.org website, which generated random lists of the questions, which were then transferred to the Zoomerang site. See Appendix B for the full questionnaire.

Certain items were used to score more than one dimension. For example, "The person is acting deliberately or intentionally" was scored for the moralising dimension, but was also negatively scored for the medicalizing dimension, due to the fact that it tested aspects of both these dimensions. See Appendix C for coding and numbering of the specific questions. Responses were scored on a seven-point Likert scale with endpoints ranging from strongly disagree to strongly agree.

Vignettes

Six vignettes were constructed to depict different mental disorders and control conditions, for the purpose of the study. These vignettes were adapted from Halgin and Whitbourne (2007), and Sarason and Sarason (2002). The use of vignettes is consistent with previous research and allowed for electronic the administration of the questionnaire.

Four vignettes depicted disorders according to DSM-IV criteria. These consisted of both seemingly obvious disorders, as well as disorders that were more difficult to identify. Depression, drug and alcohol abuse, phobias and paedophilia were entirely excluded, as depictions of these disorders exist prominently in popular culture. This would have detracted from one of the implicit aims of the study, that is, to determine whether the layperson is able to recognise disorders that they may be unfamiliar with, as pathological. Thus, inclusion of these disorders may have compromised the results of the study. Additionally, depression, substance abuse and schizophrenia have been used time and time again in previous research, and the use of less commonly known disorders may be more appropriate due to the assertion that exposure to disorders precipitates pathologizing. The disorders ultimately chosen were bipolar disorder, antisocial personality disorder, fetishism, and oppositional defiant disorder. These disorders are all from different DSM-IV categories, that is, mood disorders, personality disorders, sexual disorders and childhood disorders respectively. The reason for choosing disorders from these categories was to retain as much variation as possible. More cases would have been included, but the already extensive length of the questionnaire prevented this. In addition to the four DSM-IV disorders, two vignettes depicting control conditions were

included. The first depicted a person with mild problems, adapted from Link et al. (1999), and the second was a vignette depicting histrionic personality disorder (from Halgin and Whitbourne, 2007) that was adapted to represent a person merely eccentric, as opposed to mentally ill.

Procedure

The questionnaire was first piloted with two participants. The procedure consisted of the participants completing the questionnaire in my presence, and noting any problems or suggestions as they continued. Participants were also timed so as to provide the accurate time-span of the questionnaire when recruiting participants.

The final questionnaire was administered through the online Zoomerang survey site. Using an online survey saved time, as there was no need for manually administering pencil and paper surveys to small groups of participants. Conducting research online is also cost effective, as copious amounts of questionnaires did not have to be printed.

Ethics

Ethical approval for the study was granted by the Research Ethics Committee of the University of Cape Town's Department of Psychology. There were no great ethical dilemmas in the study as participants were not harmed in any way, and the only way they gained from the study was through receiving SRPP credit. Additionally, no deception or experimental manipulation was needed.

An informed consent form, including a brief account of what the study entailed, as well as the rights of the participant (including confidentiality) and my contact details in case of any detrimental effects, was incorporated into the survey. Participants could not proceed without completing this section.

RESULTS

Similar to Ahn et al. (2006), a mixed design factorial ANOVA was conducted on the data, using the statistics program PASW Data Editor (version 18). The reason for conducting

this particular design was for the sake of comparing aspects of multiple independent variables and a single dependent variable, simultaneously. Of the five independent variables tested, three were between-group and two were within-group variables. The statistical design allows for this test. The between-group variables were race [varied by Black, White, Coloured, and Asian (including Indian)], previous exposure to mental illness (exposed, not exposed), and level of religiosity (not at all religious, moderately religious, and very religious). Due to the fact that recruitment of participants took place on a volunteer basis, these groups were quite uneven. Furthermore, with the great majority of female participants over male participants and the fact that gender differences were not mentioned in previous research, a comparison based on gender was considered impractical. Nevertheless, for the sake of curiosity as to the possible effects of gender, the variable was initially included. However, neither main effects [$F(1, 158) = .478$, $p = .490$], nor interaction effects yielded any significant differences. Thus, gender was removed from the final analysis. The between-subjects variables have each been suggested by previous research, and thus were tested for.

Research has suggested that scores differ across dimensions, as well as across the type of disorder presented. Thus, the within-subject variables were type of disorder (antisocial personality disorder, fetishism, bipolar disorder, oppositional defiant disorder and two control groups), and dimension of the folk psychiatry model (pathologizing, moralizing, medicalizing and psychologizing). The levels of the within-subject variables just described reflects the order in which these levels were entered into the analysis. The essentialism questions were not included in the main analysis and will be discussed later. Due to the complexity of the design, as well as the fact that the aims of the study did not extend to the complex interactions (any interaction that exceeds three levels) between the within and between-subject variables were noted but not analysed at length.

The analysis began with a test of the assumptions of a mixed design factorial ANOVA. The first assumption, that the data were normally distributed, was upheld. The second assumption, homogeneity of variance, was ascertained from the Levene's test statistic for each of the within-subject factors. On the whole, homogeneity of variance at $p > .05$ was upheld, with the exception of five out of the twenty four conditions. Levene's was significant on the bipolar disorder medicalizing condition [$F(24, 175) = 1.681$, $p = .031$], the oppositional defiant disorder pathologizing condition [$F(24, 175) = 1.671$, $p = .032$], oppositional defiant disorder psychologizing condition [$F(24, 175) = 2.020$, $p = .005$], the first control disorder psychologizing condition [$F(24, 175) = 1,.647$, $p = .036$], and the second

control disorder psychologizing condition [F(24, 175) = 1.671 p = .032]. Thus, it seems that the variance was particularly heterogenic on the psychologizing dimension, and interactions involving between-subject variables on this dimension were viewed with caution. According to Field (2009), in the case of non-significant Levene's tests, transformation of the data is not always appropriate. Moreover, looking at the between-subject differences was not the primary aim of the present study. Thus, the F-values were approached with caution, but no measures were taken to correct for them. The data for the between-subject groups were independent. The final assumption, spheracity, was also violated for each of the repeated measures variables, [type of disorder F(14) = .827, p = .001; dimension of the model F(5) = .807, p = .001] as well as for the interaction between the repeated measures [F(119) = .147, p = .001]. The Greenhouse-Geisser correction would have been applied for the repeated measures variables to control for the violation of spheracity. However, Field (2009) suggests that when the Greenhouse-Geisser estimate is over 0.75, as it is in this case, [disorder F(14) = .928; dimension F(5) = .878); and the interaction between the variables F(119) = .792] the correction may be too conservative. Thus, the Huynh-Feldt [disorder (F = 1.000); dimension (F = 1.000); and interaction (F = .971)] correction was used on all effects instead. Therefore, with normality intact, the Huynh-Feldt correction in place, and a cautionary view of the psychologizing domain results, it can be concluded that the ANOVA was more or less robust and the analysis could continue. Unless otherwise specified, results were significant at the 0.05 level

Efficacy of the model

Support was found for each dimension of the model. Figure 1 shows that the means of the dimensions were all between 5 and 7 out of a total of ten. Thus, with no one mean much lower than the other three, and with all four means averaging at least 50% of the maximum score, it can be concluded that the dimensions were supported.

Correlations between all the dimensions were significant at the 0.01 level (see Table 1, below), save for the correlation between pathologizing and psychologizing [r = -.043, p = .132]. The significant correlations indicate that there was a relationship between the different dimensions. However, none of the correlations were particularly strong, with the highest being the moderate correlation between pathologizing and medicalizing [r = .479, p = .001]. Pathologizing and moralizing also had a moderate correlation [r = .329, p = .001]. Although

these correlations were relatively low, they do suggest a link between pathologizing and understanding behaviour. On the other hand, the lack of a correlation between the pathologizing and psychologizing dimensions contradict the assumption that pathologizing is necessary in order to understand behaviour. The correlations between the other dimensions, although significant, were very low, for example, the correlation between moralizing and medicalizing [r = .079, p = .006], which suggests a small degree of interrelation between the dimensions.

Table 1: *Correlations between the Folk Psychiatry Dimensions*

Correlations

		Pathologizing	Moralizing	Medicalizing	Psychologizing
Pathologizing	Pearson Correlation	1	.329**	.479**	-.043
	Sig. (2-tailed)		.000	.000	.132
	N	1200	1200	1200	1200
Moralizing	Pearson Correlation	.329**	1	.079**	.102**
	Sig. (2-tailed)	.000		.006	.000
	N	1200	1200	1200	1200
Medicalizing	Pearson Correlation	.479**	.079**	1	.191**
	Sig. (2-tailed)	.000	.006		.000
	N	1200	1200	1200	1200
Psychologizing	Pearson Correlation	-.043	.102**	.191**	1
	Sig. (2-tailed)	.132	.000	.000	
	N	1200	1200	1200	1200

**. Correlation is significant at the 0.01 level (2-tailed).

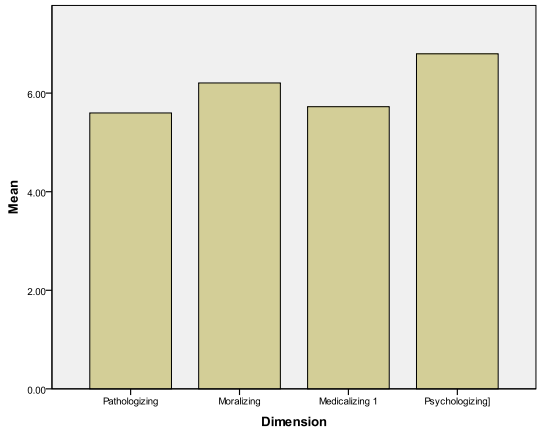

Figure 1: The means of folk psychiatry dimensions

Dimensional differences across disorders

Differences across Dimensions

The main effect for dimension of the model was significant, indicating a difference in scores on the dimensions [F(3, 525) = 41.336, p = .001]. Table 2 and figure 1 show that although the means are quite close to each other, overall, participants quite strongly supported the psychologizing dimension (M = 6.80), and that the pathologizing dimension had the lowest overall mean (M = 5.60). The large sample size (n = 1200) that appears in the table below is representative of all the data being computed under the four dimensions (so that the data at this stage did not demonstrate repeated measures). Thus the sample size became the 200 participants repeated over the six conditions.

Table 2: *Descriptive Statistics for Folk Psychiatry Dimensions*

Descriptive Statistics

	Mean	Std. Deviation	N
Pathologizing	5.5978	1.63432	1200
Moralizing	6.2061	1.39771	1200
Medicalizing	5.7242	1.52849	1200
Psychologizing	6.7968	1.26568	1200

Because the main effect was significant, pairwise comparisons were conducted to ascertain what the specific differences between the dimensions were. Pairwise comparisons (Table 3) indicated significant interactions between all dimensions with the exception of pathologizing and medicalizing (p = 1.000). This indicates that the scores on the pathologizing and medicalizing dimensions were equally high. Moralizing and psychologizing scores were both significantly higher than pathologizing scores. Psychologizing scores and moralizing scores were also significantly higher than medicalizing scores. These results indicate that the highest mean scores were for psychologizing, which, considering the non-significant interaction of this dimension with the pathologizing dimension, may compromise the validity of the folk psychiatry model.

Table 3: *Pairwise Comparisons between Dimensions of the Folk Psychiatry Model*

Pairwise Comparisons

Measure:MEASURE_1

(I) Dimension	(J) Dimension	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	-.640*[a]	.082	.000	-.857	-.422
	3	-.085[a]	.095	1.000	-.339	.168
	4	-1.143*[a]	.105	.000	-1.424	-.862
2	1	.640*[a]	.082	.000	.422	.857
	3	.554*[a]	.104	.000	.275	.833
	4	-.503*[a]	.102	.000	-.776	-.230
3	1	.085[a]	.095	1.000	-.168	.339
	2	-.554*[a]	.104	.000	-.833	-.275
	4	-1.057*[a]	.090	.000	-1.299	-.816
4	1	1.143*[a]	.105	.000	.862	1.424
	2	.503*[a]	.102	.000	.230	.776
	3	1.057*[a]	.090	.000	.816	1.299

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Based on modified population marginal mean.

b. Adjustment for multiple comparisons: Bonferroni.

Differences across disorders

The main effect for type of disorder was significant $F(5, 875) = 53.315$, $p = .001$, which suggests that understanding of mental illness is dependent on the type of illness participants are presented with. The df value in this effect was so large due to the repetition of the cases (as with differences across dimensions). Pairwise comparisons were conducted for additional analysis and revealed no differences in the mean scores between antisocial personality disorder and fetishism ($p = 1.000$), which demonstrates that scores between these disorders remained relatively similar. Similarly, there were no significant differences between oppositional defiant disorder, control condition 1 and control condition 2. Comparisons also revealed that the scores for antisocial personality disorder and fetishism each had significantly higher scores than any of the other disorders. Scores for bipolar disorder were significantly higher than scores for oppositional defiant disorder and the control conditions.

Table 4: *Pairwise Comparisons between Different Disorders and Control Conditions*

Pairwise Comparisons

Measure:MEASURE_1

(I) Disorder	(J) Disorder	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	-.057[a]	.096	1.000	-.343	.228
	3	.350[a,*]	.088	.001	.089	.611
	4	1.170[a,*]	.098	.000	.880	1.461
	5	1.091[a,*]	.099	.000	.797	1.385
	6	1.104[a,*]	.106	.000	.788	1.419
2	1	.057[a]	.096	1.000	-.228	.343
	3	.407[a,*]	.092	.000	.134	.681
	4	1.228[a,*]	.103	.000	.921	1.534
	5	1.148[a,*]	.111	.000	.819	1.478
	6	1.161[a,*]	.103	.000	.854	1.469
3	1	-.350[a,*]	.088	.001	-.611	-.089
	2	-.407[a,*]	.092	.000	-.681	-.134
	4	.820[a,*]	.092	.000	.546	1.095
	5	.741[a,*]	.099	.000	.447	1.035
	6	.754[a,*]	.099	.000	.460	1.048
4	1	-1.170[a,*]	.098	.000	-1.461	-.880
	2	-1.228[a,*]	.103	.000	-1.534	-.921
	3	-.820[a,*]	.092	.000	-1.095	-.546
	5	-.079[a]	.109	1.000	-.404	.245
	6	-.067[a]	.087	1.000	-.326	.193
5	1	-1.091[a,*]	.099	.000	-1.385	-.797
	2	-1.148[a,*]	.111	.000	-1.478	-.819
	3	-.741[a,*]	.099	.000	-1.035	-.447
	4	.079[a]	.109	1.000	-.245	.404
	6	.013[a]	.112	1.000	-.319	.345
6	1	-1.104[a,*]	.106	.000	-1.419	-.788
	2	-1.161[a,*]	.103	.000	-1.469	-.854
	3	-.754[a,*]	.099	.000	-1.048	-.460
	4	.067[a]	.087	1.000	-.193	.326
	5	-.013[a]	.112	1.000	-.345	.319

Based on estimated marginal means

a. Based on modified population marginal mean.

b. Adjustment for multiple comparisons: Bonferroni.

*. The mean difference is significant at the .05 level.

Relationship between disorder and dimension

The interaction between specific disorder and dimension of the folk psychiatry model was significant [F(14.558, 2454.978) = 32.412, p = .001]. Figure 2 depicts the interaction between specific disorder and dimension. The graph clearly supports the main effect. None of the lines mirror each other, and thus the interaction may be concluded to be significant. Pathologizing was highest for fetishism disorder, and dropped to its lowest on oppositional defiant disorder and control disorder 1. Control disorder 2, albeit slightly higher, was also quite low in terms of pathologizing. The moralizing dimension was highest for antisocial personality disorder, and stayed relatively high for fetishism. There was a big drop between fetishism and bipolar disorder, which indicates a lesser degree of moralizing judgements for bipolar disorder. Oppositional defiant disorder and control disorder 2 were on about the same level of moralizing, and the lowest point was the first control condition. Medicalizing was highest for fetishism and lowest for the second control condition. The psychologizing dimension had the highest score on antisocial personality disorder, and the lowest scores on fetishism. The way that the scores vary suggest that dimensional judgements change across disorders. A simple effects analysis revealed significant effects for each dimension [pathologizing $F(1, 199) = 13972.93$, $p < .001$; moralizing $F(1, 199) = 17934.92$, $p < .001$; medicalizing $F(1, 199) = 8139.69$, $p < .001$ and psychologizing $F(1, 199) = 14929.34$, $p < .001$] across the disorders. More extensive descriptive statistics (Table 5) depicting relationships between dimension and disorder, show that for antisocial personality disorder, psychologizing was the most prominent dimension (M = 7.74), with moralizing (M = 7.61) coming a close second. The lowest scores here were in the medicalizing dimension (M = 5.76). Fetishism was pathologized (M = 7.33) more than any other condition. Psychologizing judgements (M = 5.95) were the lowest for this disorder. Bipolar disorder was pathologized (M = 6.47) more than antisocial personality disorder (M = 5.81), with highest scores in psychologizing judgements (M = 7.05) and lowest scores in moralizing judgements (M = 5.61). For each of the first three disorders, the mean of pathologizing was above 50%. For the last three conditions, the pathologizing mean was below 50%. Thus it can be deduced that antisocial personality disorder, fetishism and bipolar disorder were pathologized more than oppositional defiant disorder, and the control conditions. Psychologizing means were the highest for each of the last three conditions, which indicates that participants felt that the individuals experienced problems as a result of environmental stressors as opposed to an underlying pathology.

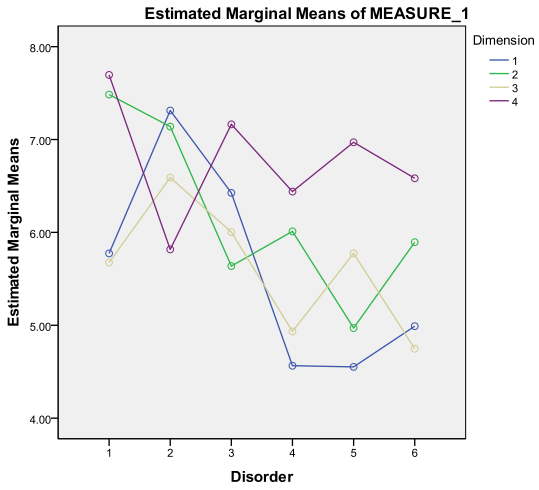

Figure 2: Interaction between dimension and disorder

Table 5: *Descriptive Statistics of Folk Psychiatry Dimensions on Disorder Conditions*

Descriptive Statistics

	Mean	Std. Deviation	N
Antisocial Pathologizing	5.8115	1.04132	200
Antisocial Moralizing	7.6068	.92382	200
Antisocial Medicalizing1	5.7575	1.35337	200
Antisocial Psychologizing	7.7475	.82668	200
Fetishism Pathologizing	7.3257	.97286	200
Fetishism Moralizing	7.1031	1.27570	200
Fetishism Medicalizing1	6.7500	1.34220	200
Fetishism Psychologizing	5.9546	1.29914	200
Bipolar Pathologizing	6.4717	1.36434	200
Bipolar Moralizing	5.6142	1.16253	200
Bipolar Medicalizing1	6.1800	1.46658	200
Bipolar Psychologizing	7.0551	1.11257	200
Oppositional Defiant Pathologizing	4.5844	1.17461	200
Oppositional Defiant Moralizing	6.0611	1.13928	200
Oppositional Defiant Medicalizing1	4.9500	1.35710	200
Oppositional Defiant Psychologizing	6.4180	1.19653	200
Control1 Pathologizing	4.4084	1.55379	200
Contriol1 Moralizing	4.9654	.87099	200
Control1 Medicalizing1	5.7750	1.34944	200
Control1 Psychologizing	6.9766	1.18847	200
Control2 Pathologizing	4.9855	1.32733	200
Control2 Moralizing	5.8864	1.03850	200
Control2 Medicalizing1	4.9325	1.45854	200
Control2 Psychologizing	6.6290	1.14257	200

Essentialism

The essentialism scores were initially included in the medicalizing dimension scores, but considering that only participants who thought the specific case was pathological were asked to answer the essentialism questions, conducting a separate analysis was thought to be a better fit to the data. Unfortunately, because certain participants only answered the questions for certain disorders, that data were not at all normally distributed. Spheracity was

also violated as F(14) = .656, p = .001. The Greenhouse-Geisser correction was again over 0.75 (F = .870), thus the Huyhn-Feldt (F = .891) was applied. Differences in essentialism between the cases were found to be significant, [F(4.457, 199) = 93.273, p = .001] thus further analysis was conducted. Pairwise comparisons (Table 7) indicated significant differences between each of the disorders except between antisocial personality disorder and control disorder 1 (p = .436), between oppositional defiant disorder and control disorder 2 (p = .071), and between the two control conditions (p = .331). The lack of significant difference between the two control conditions supports the findings of difference between dimensions according to the disorder, as does the lack of difference between oppositional defiant disorder and control disorder 2. The lack of significance between antisocial personality disorder and control disorder 2 contradicts previous findings. Descriptive statistics (Table 6) suggest the highest essentialism mean was for fetishism, indicating that participants who believed that fetishism was a disorder were the most likely to have higher essentialism scores, which is consistent with the moderately high medicalizing scores on this dimension. The lowest essentialism scores were on the oppositional defiant disorder condition, which is consistent with the low medicalizing score on this dimension. For further reference, see the descriptive statistics and pairwise comparisons below.

Table 6: *Descriptive Statistics for Each Disorder Condition*

Descriptive Statistics

	Mean	Std. Deviation	N
antisocial	4.2500	5.56257	200
fetishism	9.8600	5.47175	200
bipolar	6.9700	6.46048	200
odd	1.1550	3.65070	200
control1	3.1300	5.09144	200
control2	2.1250	4.65918	200

Table 7: *Pairwise Comparisons for Essentialist Scores*

Measure:MEASURE_1

(I) Disorder	(J) Disorder	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	-5.610*	.499	.000	-7.092	-4.128
	3	-2.720*	.595	.000	-4.488	-.952
	4	3.095*	.414	.000	1.866	4.324
	5	1.120	.509	.436	-.394	2.634
	6	2.125*	.455	.000	.774	3.476
2	1	5.610*	.499	.000	4.128	7.092
	3	2.890*	.551	.000	1.254	4.526
	4	8.705*	.436	.000	7.410	10.000
	5	6.730*	.490	.000	5.275	8.185
	6	7.735*	.447	.000	6.407	9.063
3	1	2.720*	.595	.000	.952	4.488
	2	-2.890*	.551	.000	-4.526	-1.254
	4	5.815*	.482	.000	4.383	7.247
	5	3.840*	.551	.000	2.201	5.479
	6	4.845*	.523	.000	3.292	6.398
4	1	-3.095*	.414	.000	-4.324	-1.866
	2	-8.705*	.436	.000	-10.000	-7.410
	3	-5.815*	.482	.000	-7.247	-4.383
	5	-1.975*	.397	.000	-3.154	-.796
	6	-.970	.339	.071	-1.978	.038
5	1	-1.120	.509	.436	-2.634	.394
	2	-6.730*	.490	.000	-8.185	-5.275
	3	-3.840*	.551	.000	-5.479	-2.201
	4	1.975*	.397	.000	.796	3.154
	6	1.005	.436	.331	-.289	2.299
6	1	-2.125*	.455	.000	-3.476	-.774
	2	-7.735*	.447	.000	-9.063	-6.407
	3	-4.845*	.523	.000	-6.398	-3.292
	4	.970	.339	.071	-.038	1.978
	5	-1.005	.436	.331	-2.299	.289

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

Race, exposure to mental illness and religiosity

The analysis revealed that there were no significant differences on the scores of the different racial groups [F(4, 175) = 1.123, p < .347]. There were also no significant differences between groups who had previously been exposed to mental illness and those who had not [F(1, 175) = .856, p < .427]. Furthermore, there was no significant difference overall with regards to level of religiosity [F (2, 175) = .602, p < .439]. The effects for the interactions between these variables were also all non-significant (see Table 8). Unless otherwise specified, interactions between within-group and between-group variables were largely insignificant.

Table 8: *Anova Table for Between-Subjects Effects*

Tests of Between-Subjects Effects

Measure:MEASURE_1
Transformed Variable:Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Intercept	48307.901	1	48307.901	7693.582	.000	.978	7693.582	1.000
Race	28.211	4	7.053	1.123	.347	.025	4.493	.349
Religiosity	10.749	2	5.374	.856	.427	.010	1.712	.195
Exposure	3.778	1	3.778	.602	.439	.003	.602	.120
Race * Religiosity	28.375	6	4.729	.753	.608	.025	4.519	.294
Race * Exposure	22.150	3	7.383	1.176	.320	.020	3.528	.312
Religiosity * Exposure	16.037	2	8.018	1.277	.281	.014	2.554	.275
Race * Religiosity * Exposure	22.115	5	4.423	.704	.621	.020	3.522	.251
Error	1098.823	175	6.279					

a. Computed using alpha = .05

Despite the lack of a main effect for religiosity, the interaction between dimension and religiosity, as expected, was significant [F(6, 474) = 3.085, p = .006]. Figure 3 indicates both ordinal and disordinal interactions, which, considering their shape, still support the main effect. Figure 3 also shows that pathologizing and medicalizing scores were relatively low and constant across non-religious and moderately religious participants, and then decreased for very religious participants, which suggested that, on the whole, participants understood behaviour less in medical terms. Additionally, very religious participants tended not to medicalize and pathologize behaviour as much as less religious participants The moralizing scores started quite low for non-religious participants, and increased quite dramatically for moderately religious participants staying almost constant for very religious participants.

Therefore, religious participants seem to be scoring higher on the moralizing dimension than non-religious participants.

Further interactions between dimension, gender and religiosity were possible, but due to these analyses not being related to the aims of this study, they were not pursued any further. The interactions between disorder, dimension and race [$F(58.233, 2454.978) = 2.495$, $p = .001$] disorder, dimension and exposure [$F(14.588, 2454.978) = 2.582$, $p = .001$], as well as some increasingly complex interactions were also significant. However, these significant interactions were scattered, without any consistency, and did not fall under the aims of the project. Thus they were not further explored.

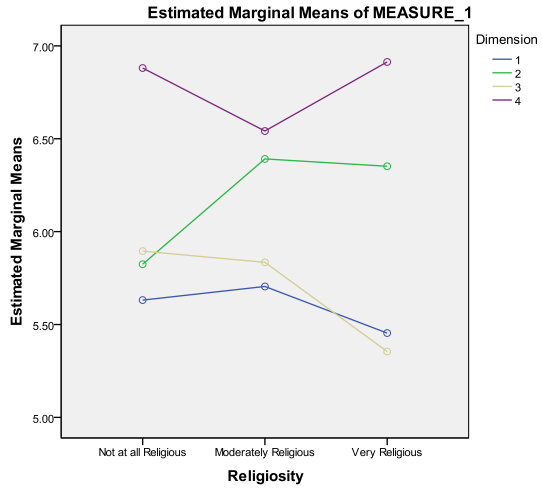

Figure 3: Interaction effects between dimension and level of religiosity

DISCUSSION

The efficacy of the model

The first aim of the study was to ascertain the efficacy of the folk psychiatry model within the South African context, through determining the existence of support for each of the dimensions, and examining the relationships between the dimensions of the model. A fair amount of support for the dimensions of the model was found. Each of the dimensions had

overall means above 50%, with the most support for the psychologizing dimension. This indicated that participants supported each of the dimensions in some capacity.

Although correlations ranged from weak to moderate, they still existed between all of the dimensions with the exception of a correlation between pathologizing and psychologizing. However, this may be due to the fact that it is possible to understand behaviour that is not pathological in a psychologized way, whereas this may not be possible for moralizing and medicalizing understandings of behaviour. For example, if one expresses anger at an upsetting situation, this response may be understood in terms of reasons for the angry reaction that stems from past experience. However, it would be difficult, to view a single angry response as representative of sinning or of having a neurological defect. Furthermore, psychologizing was particularly high for oppositional defiant disorder and the control conditions (where pathologizing was particularly low), indicating that even in the absence of pathologizing, psychologizing may still occur. This could demonstrate that pathologizing is necessary to understand the behaviour as pathological only in cases where the behaviour is abnormal. Instead of this finding invalidating the model, it may concur with findings that will be discussed next, as type of understanding (or dimension of understanding) differs across disorders. Another possible reason for the lack of correlation between psychologizing and pathologizing could be due to the fact that psychologizing was very difficult to adequately capture in the questionnaire. Psychologizing entails various internal states that do not appear in vignettes, and thus were inappropriate for use in the questionnaire. Therefore, the psychologizing domain may not have been fully tested for in this study. This may account for the discrepancy in correlation.

The mostly significant correlations lend support to the efficacy of the model, as they suggest that the dimensions are interrelated to some extent. Finding support for each dimension also suggests that the model works within the South African context, as it does in other parts of the world, and this, along with the fact the questionnaire was adapted from previous work, allows for comparison with previous research (particularly the work of Haslam et al., 2007).

Dimensional differences across disorder

The second aim of this project was to ascertain whether or not the dimensions have significantly different scores according to the disorder condition, as Mulatu (1999) implied that understanding of mental illness is dependent on the type or severity of the disorder that people are presented with. The results of the current study were congruent with this finding. Participants pathologized oppositional defiant disorder, and the two control conditions far less than they pathologized antisocial personality, fetishism and to a lesser degree, bipolar disorder. This suggests that the more overtly pathological disorders are pathologized more quickly than the less obviously pathological disorders. This, in turn, may influence the way that participants understand the disorder. Differences between antisocial personality disorder and fetishism were strongly insignificant. The lack of difference between antisocial personality disorder and fetishism is logical, because the nature of the actions described in the vignettes of these two disorders seem likely to provoke similar responses. The antisocial personality disorder vignette depicted a mass murderer and the fetishism vignette depicted someone who had a sexual perversion related to shoes, both of which, one could assume would provoke high responses particularly on pathologizing and moralizing dimensions (although, surprisingly, pathologizing for antisocial personality disorder was quite low). There were significant differences between antisocial personality disorder (and fetishism), and every other disorder. Once again, these disorders were more overtly pathological, and it stands to reason that they should differ from disorders that were less so.

There were also differences between bipolar disorder and the other disorders. This indicated that although bipolar disorder did not have the highest overall scores, it still appeared to be more pathological than oppositional defiant disorder and the control conditions. Interestingly, there was no difference between the control conditions and oppositional defiant disorder. Bearing in mind that the oppositional defiant disorder vignette could well have been mistaken for the case of a rebellious teenager, and assuming that participants were able to pathologize more or less correctly over the other conditions, it would be safe to deduce that there would be similarities between understandings of oppositional defiant disorder and the control conditions.

As mentioned before, pathologizing seems to be higher in disorders which seem more overtly abnormal (antisocial personality disorder and fetishism) as opposed to the seemingly more subtle bipolar disorder and oppositional defiant disorder, which may be misinterpreted

as merely eccentric behaviour. This finding may be compared to Lauber et al. (2003), Link et al. (1999), and Jorm et al. (1997), who found that the more overtly pathological schizophrenia was identified far more often than disorders such as substance abuse and depression. However, perhaps part of the reason that oppositional defiant disorder was not pathologized as much, was that identification of the disorder counted towards pathologizing, and very few people were able to accurately name oppositional defiant disorder.

Antisocial personality disorder and fetishism both had high moralizing scores, which, again, was to be expected, as, logically speaking, moral judgements are likely to be high in the case of sexual deviance and murder. These disorders often include behaviour that is illegal, and individuals with these disorders act in odd and dangerous ways. The finding is in concordance with Mulatu (1999), who found that schizophrenia and mental retardation (again more overtly abnormal behaviour patterns) were more likely to receive moralizing-type judgments. Bipolar disorder had far fewer moralizing judgements, and oppositional defiant disorder and the control conditions even less so. This means that the moralizing judgments, like pathologizing judgements, are consistent with more overtly pathological behaviours.

Medicalizing judgements were also quite high on the fetishism disorder condition, and lower on the control conditions. The essentialism scores mirror this trend. This is suggestive of the fact that participants believed people with fetishism belong to a group that either has the disorder or does not and that the fact that they belong to this group allows one to make inferences about them. Haslam and Ernst (2002), note that essentialist beliefs are often consistent with stigma. Therefore, considering that fetishism is considered to be a highly improper practice and is greatly frowned upon in society, it makes sense that essentialist scores were particularly high for this disorder.

Interestingly, the highest psychologizing score was on antisocial personality disorder, and the lowest on fetishism. Psychologizing means were higher than those of any other dimension for each of the last three disorders, which indicates that participants felt that the individuals experienced problems as a result of environmental stressors as opposed to an underlying pathology. This deduction could explain the lack of correlation between pathologizing and psychologizing dimensions, as people could see environmental causation of problems in functioning to be indicative of a lack of pathology. Thus, it seems that understanding of mental illness does indeed vary depending on the type of disorder being judged.

Thus, in summary, there is support for the concept that the way in which we understand mental disorders is affected by the disorder under study. Overtly pathological disorders such as antisocial personality disorder, fetishism, and schizophrenia, tend to be associated with more moralizing and pathologizing attributions. Disorders that are likely to become targets of stigma tend to receive more medicalizing (essentialist) attributions. Finally, disorders that so not seem overtly pathological, such as oppositional defiant disorder, may not be pathologized, but still receive high psychologizing attributions due to psychologizing accounting for both normal and abnormal behaviours. Overall, this finding implies that "mental illness" cannot be used as an all-encompassing term when considering understanding of mental illness.

The effects of race, exposure to mental illness and level of religiosity

The final aims of this study were to establish whether there were any significant differences with respect to race, level of exposure and religiosity of participants. Surprisingly and in contrast to almost every study done in this area, not one of the between-subject conditions yielded any sort of effect on their own, nor was there any significant effect in interaction between the variables. Despite several three-way and more complicated interactions being available, the presence of these was largely erratic, and irrelevant to the aims of the study. These interactions were thus not analysed further. However, it is important to note that unavoidably, the homogeneity of variance was violated in certain instances, and the cell sizes for comparison were grossly unequal, which may well have affected the outcome of the tests. Gender was not studied in any previous research, so the inclusion of the variable was exploratory.

The lack of differences between races was completely unexpected, and may be attributed to the homogeneity of the sample. Participants were all of similar ages, and all came from the same psychology class. As noted before, they probably hailed from more or less similar socio-economic backgrounds as well, and this may have factored in to the similarity of their responses.

A possible reason that there were no effects for level of exposure is that some participants who stated that they were exposed to metal illness were actually not clear on what constituted mental illnesses. At least six participants noted that they knew someone with Alzheimer's

disease, three noted Down syndrome, and one noted Cerebral Palsy. These disorders are neurological rather than psychological, and thus do not qualify as exposure to mental illness. Additionally, the disorder that most participants (23) stated that they were exposed to was bipolar disorder, followed by depression. The other disorders that were used in the current study did not factor into participant's level of exposure. Considering that understanding of mental illness depends on the type of disorder, and that past research has linked exposure to depression, specifically to its recognition, it could also be the case, that participant's were not exposed to the specific disorders that were tested.

There were some further significant interactions between the within-subjects and between-subjects variables. One such case was the relationship between dimension and religiosity, despite the fact that religiosity had no significant main effect. A possible reason for this disparity may be that past research has found links exclusively between the moral dimension and religiosity. For example, Hartog and Gow (2005), and Minas et al. (2007), found that strong religious beliefs were associated with higher moralizing-type scores. Consistent with their findings, the current study found that moderately religious and very religious participants had higher moralizing scores than non-religious participants. Thus, relationships between religiosity and any of the other dimensions would have been unexpected to say the least.

Limitations and suggestions for future research

The first limitation of the study is the lack of generalizabilty. As with other studies of this nature, the convenience sample of undergraduates had implicit flaws. The sample was predominantly White and female, which despite allowing for accurate comparison with previous research, is still less than satisfactory. Furthermore, only psychology students were used, denoting that the sample would have at least a rudimentary interest in psychology and may have more information about the disorder than the layperson would. The homogenised sample of undergraduates also assumed that students were from a particular socio-economic status, further limiting generalizability. Additionally, in order to accurately test whether the model works in South Africa, it should be tested with a representative sample of South Africans.

One problem noted by both the pilot study participants, as well as many of the participants in the main study, was that the questionnaire was extremely long, and participants struggled to complete it. A possible improvement on this could be to split up the mental disorders, so that each participant only has to complete two conditions (which would take half an hour as opposed to an hour and half). Thus, considering the finding that understanding of mental illness differs according to the disorder, more disorders could be tested. However, this would require a much larger sample than the sample used in the present study.

Another problem with the study is the limited number of disorders examined. An extensive test of the theory posited would include many different disorders, especially considering the finding of both this study and previous research, that scores on dimensions differ according to the type of disorder presented. I was unable to include more disorders in this study due to the length of the questionnaire and issues of participant motivation and fatigue. Perhaps a more extensive study with a much larger sample size could incorporate several disorders with separate versions of questionnaires that have different disorders in them to be able to encompass the wide range of mental illness.

A further limitation to the body of research on this subject as a whole is the lack of any qualitative studies. All studies have been exclusively quantitative and have reduced the concept of understanding mental illness to rating scales. To add depth, interviews or focus groups could be conducted to discuss ideas about mental illness and its aetiology. This kind of research would not only aid knowledge of how the layperson understands mental illness, but it may also inform the direction of future quantitative work.

Experimental studies may also enrich this field. An example would be to pre-test participants understanding with short vignettes (as with this study), then providing them with some literature on particular disorders, and giving them a post-test to ascertain whether educating participants about disorders improves mental health literacy. A further direction may be to test how friends and family members of people with mental illness (those exposed, to specific disorders) compare with the layperson who has had no exposure to mental illness.

REFERENCES

Ahn, W., Flanagan, E.H., Marsh, J. K., & Sainslow, C. A. (2006). Beliefs about essences and the reality of mental disorders. *Psychological Science, 17,* 759-766.

Field, A. (2009). *Discovering statistics using SPSS.* Sage Publication Ltd: London.

Halgin, R. P., & Whitbourne, S. K. (2007). *Abnormal psychology: Clinical perspectives on psychological disorders (5th ed.)*. New York: McGraw-Hill.

Hartog, K., & Gow, K. M. (2005). Religious attributions pertaining to the causes and cures of mental illness. *Mental Health, Religion & Culture, 8*, 263-276.

Haslam, N., Ban, L., & Kaufmann, L. (2007). Lay conceptions of mental disorder: The folk psychiatry model. *Australian Psychologist, 42,* 129-137.

Haslam, N., & Ernst, D. (2002). Essentialist beliefs about mental disorders. *Journal of Social and Clinical Psychology, 21*, 628-644.

Haslam, N., & Giosan, C. (2002). The lay concept of "mental disorder" among American undergraduates. *Journal of Clinical Psychology, 58,* 479-485.

Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry, 177*, 396-401.

Jorm, A. F., Christensen, H., & Griffiths, K. M. (2006). The public's ability to recognize mental disorders and their beliefs about treatment: changes in Australia over 8 years. *Australian and New Zealand Journal of Psychiatry, 40,* 36–41.

Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental Health Literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *The Medical Journal of Australia, 166,* 182-186

Lauber, C., Nordt, C., Falcato, L., & Rössler, W. (2003). Do people recognise mental illness? Factors influencing mental health literacy. *European Archives Psychiatry & Clinical Neuroscience, 253,* 248–251.

Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: labels, causes, dangerousness, and social distance. *American Journal of Public Health, 89*, 1328–1333.

Manis, M., Houts, P. S., & Blake, J. B. (1963). Beliefs about mental illness as a function of psychiatric status and psychiatric hospitalisation. *Journal of Abnormal and Social Psychology, 67,* 226-223.

Minas, H., Klimidis, S., & Tuncer, C. (2007). Illness causal beliefs in Turkish immigrants. *BMC Psychiatry, 7,* 34-43.

Mulatu, M. S. (1999). Perceptions of mental and physical illnesses in North-western Ethiopia: Causes, treatments, and attitudes. *Journal of Health Psychology, 4,* 531-549.

Nakane, Y., Jorm, A. F., Yoshioka, K., Christensen, H., Nakane, H., & Griffiths K. M. (2005). Public beliefs about causes and risk factors for mental disorders: A comparison of Japan and Australia. *BMC Psychiatry, 5,* 1-9.

Nathan, J. H., Wylie, A. M., & Marsella, A. J. (2001). Attribution and serious mental illness: Understanding multiple perspectives and ethno-cultural factors. *American Journal of Orthopsychiatry, 71,* 350-357.

Rabkin, J. G. (1972). Opinions about mental health: A review of the literature. *American Psychological Association psychological Bulletin, 77,* 153-171.

Read, J., & Harré, N. (2001). The role of biological and genetic causal beliefs in the stigmatisation of 'mental patients'. *Journal of Mental Health, 10,* 223-235.

Sarason, I. G., & Sarason, B. G. (2002). *Abnormal Psychology: The problem of maladaptive behaviour (10th ed.).* New Jersey: Pearson education.

Schnittker, J., Freese, J., & Powell, B. (2000). Nature, nurture, neither, nor: Black-White differences in beliefs about the causes and appropriate treatment of mental illness. *Social Forces, 78,* 1101-1130.

APPENDIX A: VULA ANNOUNCEMENT

Hey all first years,

I'm doing a study about how people view mental illness, and I would like to invite you all to participate. Basically, it involves reading cases, and then filling out a questionnaire. Some of the cases you will read depict mental disorders, while others depict people with everyday problems. You will be need to identify whether or not the person in the case has a mental disorder, and then rate what you think the most likely cause of the disorder is through a series of questions. Finally, you will be asked whether you think the people in the case studies should seek treatment or not. The questionnaire is online, so you can do it whenever and wherever you want. However, please note that I close the link in two weeks time, or after there are 200 complete questionnaires. If you are interested, the details are below.

Study Name:	The Layperson's view of mental illness
Who can Participate?	Any UCT first year student between the ages of 18 and 25.
How long will it take?	60-90 minutes.
	What do you get out of it? 3 SRPP points if you complete it. (That's the entire semesters SRPP credits!)
	What to do: Follow the link to the zoomerang site, below, and fill out the online questionnaire. Be sure to put your student number in the slot provided for SRPP credit purposes.
Link:	http://www.zoomerang.com/Survey/WEB22AWHD7F2QV

If you have any questions, you are welcome to email me at mariamparks@gmail.com.

Thank you,

Mariam Parker

Honours,

Department of Psychology

University of Cape Town

APPENDIX B: QUESTIONNAIRE

The Layperson's view of Mental Illness

Informed Consent

This study aims to unearth how the layperson understands mental disorders. It involves reading cases, and then filling out a questionnaire. Some of the cases you will read depict mental disorders, while others depict people with everyday problems. You will be required to identify whether or not the person in the case has a mental disorder, and then rate what you think the most likely cause of the disorder is. Finally, you will be asked whether you think the people in the case studies should seek treatment or not. The questionnaire will take a maximum of ninety minutes to complete. Some of the content you are required to read is explicit, so this study is not for a sensitive person. If you require any sort of counselling on completion of the study, please contact the researcher, who will provide you with a referral. The information you provide will be kept completely confidential. The only person who will have access to your details is the researcher. Your student number is needed only for SRPP credit, and you will receive 3 credits on completion of the study. Your role is voluntary. If at any time you wish to withdraw from the study, you are within your rights to do so. However, should you decide to withdraw, you will not receive full SRPP credit. If you withdraw without having completed any of the tasks, you will receive no credits. If you complete over half of the questionnaire and then withdraw, you will receive 1 credit.

For questions regarding the research, you may contact the researcher, Mariam Parker, via email, mariamparks@gmail.com .

Declaration

I hereby agree to partake in the study undertaken by Mariam Parker. I acknowledge that I have been fully informed of my rights. I declare that I am over 18 years of age and as such have the authority to consent to research. I agree to provide data and to allow the use of said data to the researcher.

- ○ I agree
- ○ I disagree

Instructions

The questionnaire asks your opinion on six cases. You will be asked to read a case, after which you will be given a series of statements, and asked to which extent you agree or disagree with the statement on a scale of 1 to 5. Each case is on a seperate page with its corresponding questions

The scale reads as follows: 1= strongly disagree, 2 = moderately disagree, 3 = neutral, 4 = moderately agree, and 5 = strongly agree. Click on the number you feel most appropriate for the question. If you have any extra thoughts about any of the questions, you are welcome to add them at the end of the questionnaire.

Your information will be kept entirely anonymous, so please answer as honestly as possible.

Details

- ✍ Student Number
- ✍ Age
- ✍ Race
- ✍ Gender

How religious do you consider yourself to be?

- ❑ Not at all Religious
- ❑ Moderately Religious
- ❑ Strongly Religious

Has anyone you know been diagnosed with a mental disorder?

- ❑ Yes
- ❑ No

If so, what is your relationship to this person?

.....

What was the diagnosis?

.....

Case 1 (antisocial personality disorder)

Gary started drinking at age ten and later started using a variety of illegal drugs. Despite being highly intelligent with wide general knowledge, his grades at school were poor, he was often absent or late, and was accused of stealing from his classmates. Gary was in and out of juvenile facilities and jails from the age of 14 for robbery and burglary. While in prison, he was known for cruel and violent behaviour. He lacked sympathy and guilt for any of his actions. He never had a steady job or a long-lasting relationship. He ultimately murdered two people. Gary's childhood was marked by violence, abuse and neglect, where any small mistake was punished with both physical and emotional abuse.

1) The person is mentally ill
2) If so, what disorder do you think the person suffers from?
3) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
4) This person is recognizably different in manner and appearance than a normal person
5) The person has no self-restraint or willpower
6) The person should be held accountable for their actions
7) The behaviour exhibited is morally wrong
8) The person could act the way they do due strained interpersonal relationships
9) The person behaves in this way due to the influence of genetic factors
10) The person's current environment affects their behaviour
11) The person could be acting the way they do due to financial strain
12) The behaviour results from worry or anxiety
13) The person may have experienced a traumatic event that influenced the way they behave today
14) The behaviour exhibited is depraved
15) The behaviour exhibited is criminal
16) The person could act this way because their hormone level provokes it
17) This person has a character problem or flaw
18) The behaviour exhibited is sinful
19) The person could behave this way as a result of their childhood experiences
20) The behaviour exhibited is as a result of life stressors
21) The person actions reflect bad intentions

22) The person could behave this way due to a structural brain abnormality
23) The person behaves the way they do as a result of the way they were raised
24) The person has complete control of their actions
25) This person should seek psychological treatment
26) This person should seek medical treatment

Only answer the next four questions if you believe that the person has a mental disorder

1) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
2) People with the disorder are very similar to one another
3) The disorder can be readily and easily cured
4) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Case 2 (fetishism)

For several years, Tom has been breaking into cars and stealing boots or shoes, and he has come close to being caught on many occasions. He takes great pleasure in the excitement he experiences each time he engages in the ritualistic behaviour of procuring a shoe or boot and going to a secret place to fondle it and masturbate. At home, he has a closet filled with dozens of women's shoes, and he chooses from this selection the particular shoe with which he will masturbate. Sometimes, he sits in a shoe store and watches women trying on shoes. After a woman tries on a pair and rejects them, he scoops them up and takes them to the cash register. He tells the register that the shoes are a gift for his wife, and rushes home with eager anticipation to engage in his ritual.

1) The behaviour is rare
2) The behaviour is normal
3) The person's behaviour is difficult to understand
4) The person is mentally ill
5) If so, what disorder do you think the person suffers from?
6) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
7) This person is recognizably different in manner and appearance than a normal person
8) The behaviour exhibited is morally wrong
9) The person should be held accountable for their actions
10) The person has no self-restraint or willpower
11) The behaviour exhibited is as a result of life stressors
12) The person has complete control of their actions
13) The person's current environment affects their behaviour
14) The person behaves the way they do as a result of the way they were raised
15) This person has a character problem or flaw
16) The behaviour results from worry or anxiety
17) The person could act the way they do due strained interpersonal relationships
18) The behaviour exhibited is depraved
19) The behaviour exhibited is sinful
20) The person could act this way because their hormone level provokes it

21) The person may have experienced a traumatic event that influenced the way they behave today
22) The person could behave this way as a result of their childhood experiences
23) The behaviour exhibited is criminal
24) The person actions reflect bad intentions
25) The person behaves in this way due to the influence of genetic factors
26) The person could be acting the way they do due to financial strain
27) The person could behave this way due to a structural brain abnormality
28) This person should seek psychological treatment
29) This person should seek medical treatment

Only answer the next four questions if you believe that the person has a mental disorder

1) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
2) People with the disorder are very similar to one another
3) The disorder can be readily and easily cured
4) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Case 3 (Bipolar)

Isabel is a 38-year-old real estate agent who, for the past week has shown signs of uncharacteristically outlandish behaviour. This behaviour began with Isabel's development of an unrealistic plan to create her own real estate "empire". She went without sleep or food for 3 days, spending most of her time at her computer developing far-fetched financial plans. Within 3 days she put deposits on 7 houses, together valued at more than R10 Million, although she had no financial resources to pay for even one of them. She made several visits to local banks, where she was known and respected, and "made a scene" with each loan officer who expressed scepticism about her plan. In one instance she angrily pushed over the banker's desk, yanked his phone from the wall, and screamed at the top of her lungs that he was keeping her from earning a multimillion dollar profit.

1) The behaviour is rare
2) The behaviour is normal
3) The person's behaviour is difficult to understand
4) The person is mentally ill
5) If so, what disorder do you think the person suffers from?
6) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
7) This person is recognizably different in manner and appearance than a normal person
8) The person behaves in this way due to the influence of genetic factors
9) The person should be held accountable for their actions
10) The person's current environment affects their behaviour
11) The person could behave this way as a result of their childhood experiences
12) The behaviour exhibited is sinful
13) The person could behave this way due to a structural brain abnormality
14) The person behaves the way they do as a result of the way they were raised
15) The behaviour exhibited is morally wrong
16) The person could act the way they do due strained interpersonal relationships
17) This person has a character problem or flaw
18) The behaviour exhibited is depraved
19) The person could be acting the way they do due to financial strain
20) The person has no self-restraint or willpower

21) The person may have experienced a traumatic event that influenced the way they behave today
22) The behaviour results from worry or anxiety
23) The behaviour exhibited is criminal
24) The person actions reflect bad intentions
25) The behaviour exhibited is as a result of life stressors
26) The person has complete control of their actions
27) The person could act this way because their hormone level provokes it
28) This person should seek psychological treatment
29) This person should seek medical treatment

Only answer the next four questions if you believe that the person has a mental disorder

1) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
2) People with the disorder are very similar to one another
3) The disorder can be readily and easily cured
4) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Case 4 (oppositional defiant disorder)

Mindy, at age 13, has changed in the past year from a relatively reserved and socially isolated young teenager to what her father now calls “a little tramp”. Apart from her behaviour, which include staying out late at night, visiting university residences nearby, and bunking most of her classes during the day, Mindy’s looks suggest those of a much older and streetwise adolescent. Mindy dyed her hair orange, wears heavy makeup, and dresses in provocative clothes. The more her parents tell her to behave and dress like a “normal” girl, the more she seems driven to defy them. Mindy expresses anger to her parents to the extent that they cannot sleep at night, fearing that she may run away with one of the motorcyclists she has befriended.

1) The behaviour is rare
2) The behaviour is normal
3) The person's behaviour is difficult to understand
4) The person is mentally ill
5) If so, what disorder do you think the person suffers from?
6) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
7) This person is recognizably different in manner and appearance than a normal person
8) The person’s current environment affects their behaviour
9) This person has a character problem or flaw
10) The person could act this way because their hormone level provokes it
11) The person could behave this way due to a structural brain abnormality
12) The person could be acting the way they do due to financial strain
13) The behaviour exhibited is depraved
14) The person may have experienced a traumatic event that influenced the way they behave today
15) The person should be held accountable for their actions
16) The behaviour results from worry or anxiety
17) The person has complete control of their actions
18) The behaviour exhibited is morally wrong
19) The behaviour exhibited is criminal
20) The person actions reflect bad intentions

21) The behaviour exhibited is sinful
22) The behaviour exhibited is as a result of life stressors
23) The person behaves in this way due to the influence of genetic factors
24) The person has no self-restraint or willpower
25) The person could act the way they do due strained interpersonal relationships
26) The person could behave this way as a result of their childhood experiences
27) The person behaves the way they do as a result of the way they were raised
28) This person should seek psychological treatment
29) This person should seek medical treatment

Only answer the next four questions if you believe that the person has a mental disorder

1) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
2) People with the disorder are very similar to one another
3) The disorder can be readily and easily cured
4) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Case 5 (Control 1)

Justin is a 25-year old engineer. He gets along well with her family, and enjoys being with other people. However, he sometimes feels worried, a little sad, or has trouble sleeping at night. He feels that at times things bother him more than they bother other people and that when things go wrong, he sometimes gets nervous or annoyed. Occasionally, he loses his temper when people are hypocritical, which is the trait that annoys him most.

1) The behaviour is rare
2) The behaviour is normal
3) The person's behaviour is difficult to understand
4) The person is mentally ill
5) If so, what disorder do you think the person suffers from?
6) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
7) This person is recognizably different in manner and appearance than a normal person
8) The person should be held accountable for their actions
9) The behaviour exhibited is as a result of life stressors
10) The person could behave this way as a result of their childhood experiences
11) The person could act this way because their hormone level provokes it
12) The behaviour exhibited is morally wrong
13) The person actions reflect bad intentions
14) The person has no self-restraint or willpower
15) The person could behave this way due to a structural brain abnormality
16) This person has a character problem or flaw
17) The person may have experienced a traumatic event that influenced the way they behave today
18) The person could act the way they do due strained interpersonal relationships
19) The person behaves the way they do as a result of the way they were raised
20) The behaviour results from worry or anxiety
21) The person has complete control of their actions
22) The person behaves in this way due to the influence of genetic factors
23) The behaviour exhibited is criminal

24) The person's current environment affects their behaviour
25) The behaviour exhibited is sinful
26) The person could be acting the way they do due to financial strain
27) The behaviour exhibited is depraved
28) This person should seek psychological treatment
29) This person should seek medical treatment

Only answer the next four questions if you believe that the person has a mental disorder

1) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
2) People with the disorder are very similar to one another
3) The disorder can be readily and easily cured
4) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Case 6 (Control 2)

Lynnette is a 44-year old high school teacher who is notorious for her eccentric behaviour and flirtatiousness. She often greets students with overwhelming warmth and apparent concern for their welfare, which leads some to find her appealing and engaging at first. However, they invariably become disenchanted, once they realise how shallow she is. She constantly exaggerates her accomplishments, and tends to change her story to suit whomever she is talking to at the time.

1) The behaviour is rare
2) The behaviour is normal
3) The person's behaviour is difficult to understand
4) The person is mentally ill
5) If so, what disorder do you think the person suffers from?
6) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
7) This person is recognizably different in manner and appearance than a normal person
8) The person could behave this way due to a structural brain abnormality
9) The behaviour results from worry or anxiety
10) The person could act the way they do due strained interpersonal relationships
11) The person may have experienced a traumatic event that influenced the way they behave today
12) The person has complete control of their actions
13) The person should be held accountable for their actions
14) The behaviour exhibited is morally wrong
15) This person has a character problem or flaw
16) The person's current environment affects their behaviour
17) The behaviour exhibited is depraved
18) The person could behave this way as a result of their childhood experiences
19) The person behaves in this way due to the influence of genetic factors
20) The person could be acting the way they do due to financial strain
21) The behaviour exhibited is criminal
22) The behaviour exhibited is as a result of life stressors
23) The behaviour exhibited is sinful

24) The person behaves the way they do as a result of the way they were raised
25) The person could act this way because their hormone level provokes it
26) The person has no self-restraint or willpower
27) The person actions reflect bad intentions
28) This person should seek psychological treatment
29) This person should seek medical treatment

Only answer the next four questions if you believe that the person has a mental disorder

1) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
2) People with the disorder are very similar to one another
3) The disorder can be readily and easily cured
4) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Additional Comments
Thank you so much for taking the questionnaire. Please ensure that you have entered your student number and look out for your credit on vula soon. For any questions, do not hesitate to email me at mariamparks@gmail.com. Please feel free to leave any comments that you have

APPENDIX C: QUESTION CODING

Scale: **1 = Strongly Disagree**

2 = Moderately Disagree

3 = Neutral

4 = Moderately Agree

5 = Strongly Agree

Pathologizing Dimension

1) The behaviour is rare
2) The behaviour is normal (**reverse scored**)
3) It is difficult to understand why these people are the way they are
4) The person has a mental disorder
5) If you believe that the person has a mental disorder, please identify what you think it is (scale: 5 = correct disorder; 3 = some mention of the category the disorder fits into; 1 = incorrect or left out) For cases 2 and 4,(controls) [scale: 1 = no diagnosis; 5 = diagnosis]
6) This person has an impaired ability to cope with the demands of everyday life, such as functioning socially or at work
7) This person is recognizably different in manner and appearance than a normal person

Moralizing Dimension

1) The behaviour exhibited is sinful
2) The person's actions reflect bad intentions
3) The behaviour exhibited is criminal
4) The person has complete control of their actions
5) The person should be held accountable for their actions
6) The person has no self-restraint or willpower

7) The behaviour exhibited was depraved
8) The behaviour exhibited is morally wrong
9) The person has a character problem or flaw

Medicalizing Dimension

1) The person acts this way because their hormone level provokes it
2) The person has complete control over their actions (**Reverse scored**)
3) The person could behave this way due to a structural brain abnormality
4) The person behaves in this way due to the influence of genetic factors

Essentialism questions

5) The disorder is a category that has clear and sharp boundaries, so that people either have the disorder or they do not?
6) People with the disorder are very similar to one another
7) The disorder could be readily and completely cured
8) People with the disorder must have certain necessary features in order to be categorised as having the disorder?

Psychologizing Dimension

1) The person could act the way they do due to strained interpersonal relationships
2) The person behaves the way they do as a result of the way they were raised
3) The behaviour results from worry or anxiety
4) The person has complete control of their actions (**Reverse scored**)
5) The person could behave the way they do as a result of their childhood experiences
6) The person could be acting the way they do due to financial strain
7) The person's current environment affects their behaviour
8) The person may have experienced a traumatic event that influenced the way they behave today
9) The behaviour exhibited is as a result of life stressors

AUTHOR'S NOTE

I would like to acknowledge and thank my thesis supervisor, Johann Louw for assistance with regards to drafts and conceptualization of my argument. Secondly, Robyn Human deserves much thanks for her valuable assistance with performing the statistical analysis and understanding the data. On a related note, Jill Mosdell was also of assistance in conceptualizing the statistical analysis. Thirdly, Debbie Kaminer advised me about implementing vignettes into my questionnaire, and provided direction as to where to find appropriate cases. Next, I would like to acknowledge the aid of Nicholas Haslam and Harry Minas, who sent me questionnaires and offered advice on adapting these for my study. Finally, thanks goes to Razia Parker, who despite no longer being enrolled in our Honours class, still offered to read drafts and provided valuable input.

University of Cape Town

Faculty of Humanities

PLAGIARISM DECLARATION

Full name: Mariam Parker

Student number: PRKMAR012

Course name: Psychology Honours

Course code: PSY4000W

Due date: 28 October 2010

1. I know that plagiarism is wrong. Plagiarism is to use another's work and to pretend that it is one's own.

2. I have used the American Psychological Association convention for citation and referencing. Each significant contribution to, and quotation in, this essay from the work, or works, of other people has been acknowledged through citation and reference.

3. This essay is my own work.

4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

_____

Signature 27 October 2010