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Mental Disorder and Suicide: What's the Connection?

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This paper offers a philosophical analysis of the connection between mental disorder and suicide risk. In contemporary psychiatry, it is commonly suggested that this connection is a causal connection that has been established through empirical discovery. Herein, I examine the extent to which this claim can be sustained. I argue that the connection between mental disorder and increased suicide risk is not wholly causal but is partly conceptual. This in part relates to the way suicidality is built into the definitions of some psychiatric diagnoses. It also relates to the broader normative assumption that suicidal behavior is by definition mentally disordered behavior. The above has significant epistemological implications, which I explore. I propose that the claim that suicide is connected with mental disorder cannot be justified solely by appealing to empirical evidence but also warrants a justification on conceptual and normative grounds.

Keywords: *causal connection, conceptual connection, mental disorder, philosophy of psychiatry, suicide*

I. INTRODUCTION

It is a truism in contemporary healthcare discourse that suicide is connected with mental disorder. This is reflected in suicide prevention policies developed by major public health agencies, such as the World Health Organization's report on *Preventing Suicide*, which considers suicide prevention to be an "integral part" of the organization's Mental Health Action Plan (2014, 7), and the Department of Health's *Preventing Suicide in England* initiative, which states that suicide prevention begins "with better mental health

for all" (Department of Health, 2012, 4). Suicide rates are widely recognized to be higher among people diagnosed with mental disorders than among people without mental disorders. Accordingly, psychiatrists are expected to undertake the duties of suicide risk assessment and prevention, with the Royal College of Psychiatrists recommending that "new trainees in psychiatry should receive training in risk assessment including managing suicide risk" (2004, 22).

The claim that suicide is connected with mental disorder is often depicted as being a straightforward empirical claim. It is usually supported with reference to the results of psychological autopsy studies which retrospectively examine the circumstances surrounding suicide cases in order to ascertain the relevant antecedents, including any symptoms of diagnosable mental disorders (Barraclough et al., 1974; Cavanagh et al., 2003). These studies are reported as showing that diagnosable mental disorders are present in approximately 90 percent of suicide cases, with affective disorders being the most common diagnoses. Furthermore, the connection is often suggested to be causal, so that mental disorder is inferred to be not merely a correlate but an important cause of the increased risk of suicide (Isacsson and Rich, 2003).

The following discussion provides a philosophical analysis of the conceptual and normative presuppositions underlying the claim that mental disorder is associated with suicidal behavior. Some recent scholars have disputed the strength of this connection on empirical and methodological grounds (Pouliot and De Leo, 2006; Hjelmeland et al., 2012). However, this is not my aim here. Rather, my contention is that the connection is not entirely causal but is to some extent conceptual. I argue that the association between mental disorder and suicide is partly, though not wholly, a result of the way suicidal behavior is presupposed to be mentally disordered behavior. This raises interesting epistemological issues concerning causal explanation and hypothesis testing. It also suggests that the claim that suicide is connected with mental disorder is not a straightforward empirical hypothesis that can be justified solely by appealing to the observation that the two are correlated but also comprises a normative judgment that warrants a philosophical justification.

The plan for the rest of this paper is as follows. In Section II, I consider the diagnosis of schizophrenia in order to illustrate the kind of case where the connection between mental disorder and increased suicide risk is plausibly causal. However, such cases make up the minority of suicide cases that are associated with diagnosable mental disorders. In Section III, I consider some cases where the connection between mental disorder and increased suicide risk is more strongly conceptual. These include cases of major depressive disorder and borderline personality disorder, where suicidal thoughts and acts are explicitly built into the definitional criteria for the diagnoses. In Section IV, with reference to the putative categories of masked depression and suicidal behavior disorder, I show that there remains a tendency to

attribute suicide to mental disorder even in cases where the criteria for more established psychiatric diagnoses are not met. This, I argue, reflects the normative assumption that suicidal behavior is prima facie mentally disordered behavior. In Section V, I explore the epistemological and normative issues raised by the presence of a conceptual connection between mental disorder and suicide.

Before proceeding further, something needs to be said about the meanings of "mental disorder" and "suicide." The following definition of "mental disorder" is suggested by the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*-5), which is the dominant diagnostic manual in psychiatry in the present day:

> A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability. (American Psychiatric Association, 2013, 20)

In addition, *DSM*-5 offers operational definitions of specific kinds of mental disorder, some of which shall be examined throughout the course of this paper. The above *DSM*-5 definition of "mental disorder" is not unproblematic. Singh and Sinnott-Armstrong (2015) comment that some of the unclarified and evaluative expressions used, such as "clinically significant," "disturbance," and "dysfunction," result in some vagueness and flexibility in the definition. Nonetheless, given that this current paper explores the practices and discourses surrounding *DSM*-5 diagnoses, I largely follow the *DSM*-5 definition. With respect to the meaning of "suicide," the World Health Organization proposes that "suicide is the act of deliberately killing oneself" and that "suicidal behaviour refers to a range of behaviours that include thinking about suicide (or ideation), planning for suicide, attempting suicide and suicide itself" (2014, 12). Importantly, while suicide refers to an act with a fatal outcome, suicidal behavior may or may not have a fatal outcome.

II. MENTAL DISORDER AS A CAUSE OF SUICIDE

In this section, I present the kind of diagnosis where the connection between mental disorder and the increased risk of suicide is plausibly causal. I use the example of schizophrenia to show what it is about the conceptual structure of such a diagnosis that permits a causal connection to be posited. As we shall see, the conceptual structure of schizophrenia permits the theoretical possibility of a straightforward causal connection between mental disorder and increased suicide risk because suicidality is not explicitly contained in the definitional criteria for schizophrenia.

As with other psychiatric diagnoses, the diagnosis of schizophrenia is based on the presence of a characteristic cluster of symptoms and signs. According to *DeGowin's Diagnostic Examination*, symptoms refer to abnormalities the patient perceives, whereas signs refer to abnormalities detected by the examiner (LeBlond, DeGowin, and Brown, 2009). Although this distinction is of importance in the context of clinical practice, it does not have significant consequences with respect to the argument of this paper. For this reason and for the sake of brevity, I henceforth refer to symptoms and signs collectively as "symptoms." According to *DSM*-5, a person must exhibit at least two of the following symptoms for a significant portion of time during a period of 1 month in order to receive a diagnosis of schizophrenia:

1. Delusions.
2. Hallucinations.
3. Disorganized speech (e.g., frequent derailment or incoherence).
4. Grossly disorganized or catatonic behavior.
5. Negative symptoms (i.e., diminished emotional expression or avolition) (American Psychiatric Association, 2013, 99).

Furthermore, it must be the case that the "level of functioning in one or more areas, such as work, interpersonal relations, or self-care, is markedly below the level achieved prior to onset" (American Psychiatric Association, 2013, 99).

Schizophrenia is associated with significant morbidity and early mortality. People diagnosed with schizophrenia are significantly more likely to die from suicide than people in the general population (Palmer, Pankratz, and Bostwick, 2005). The risk of suicide is particularly increased in patients with prominent auditory hallucinations, paranoid delusions, and psychomotor agitation. It is also higher in patients with comorbid affective symptoms and substance use (Hor and Taylor, 2010).

Importantly, suicidality itself is not contained in the diagnostic criteria for schizophrenia. Hence, the association between a diagnosis of schizophrenia and the increased risk of suicide is not attributable to any explicit conceptual connection between the two. Rather, the association between the two is something which must be established empirically. Indeed, the hypothesis that the symptoms of schizophrenia are causally related to suicidal thoughts and acts is plausible and has evidence in its favor. For example, suicidal behavior in schizophrenia could be a reaction to distressing delusions, a response to command hallucinations, or a consequence of an agitated psychomotor state. It could also be the result of the despair regarding the social alienation associated with the diagnosis (Ventriglio et al., 2016).

To be clear, this is not to claim that suicide which occurs in the context of schizophrenia is always or exclusively caused by the mental disorder. Suicide is a complex outcome of many diverse reasons and causes which interact in various ways. Accordingly, the increased risk of suicide in schizophrenia

is likely to be influenced by a multitude of factors beyond the symptoms of the disorder, including social adversity, stigmatization, loss of support, and substance use. It is also possible that some of these factors may be common causal factors that contribute to both increased suicide risk and the development of schizophrenia. Rather, my claim is more modest. Given that the operational definition of schizophrenia does not explicitly include suicidality as a criterion, the hypothesis that the symptoms of schizophrenia causally contribute to the development of suicidality can be straightforwardly assessed with appeal to empirical evidence, without the worry that the result might be confounded by the presence of a closer conceptual connection between schizophrenia and suicidality.

Thus, the diagnosis of schizophrenia provides an example of the kind of case where the association between the mental disorder and suicidality is not due to any explicit conceptual connection between the two but plausibly reflects a causal connection. This may also be applicable to psychiatric diagnoses other than schizophrenia that are associated with increased rates of suicide but whose diagnostic criteria do not explicitly include suicidal thoughts or acts, such as eating disorders and panic disorder. However, such cases make up the minority of suicide cases that are linked to diagnosable mental disorders. In the majority of suicide cases that are linked to diagnosable mental disorders, the disorders are those whose diagnostic criteria explicitly include suicidal thoughts or acts. In such cases, the connection between mental disorder and suicide is more strongly conceptual, as I argue in Section III.

III. SUICIDAL BEHAVIOR AS A DIAGNOSTIC CRITERION

It is often reported that affective disorders can be diagnosed in the majority of suicide cases that are associated with mental disorders (Barraclough et al., 1974; Cavanagh et al., 2003). Affective disorders are a group of psychiatric diagnoses that are predominantly characterized by mood disturbances which are distressing and disabling. Key examples are major depressive disorder and bipolar disorder. Major depressive disorder is reported as being the most prevalent diagnosis in cases of completed suicide, whereas bipolar disorder is reported as being the diagnosis associated with the highest lifetime risk of suicide (Jamison, 2000).

In this section, I argue that the association between an affective disorder diagnosis and the increased risk of suicide is to some degree self-fulfilling, because there is an explicit conceptual connection between the two. This owes itself to the way that suicidality is contained in the definitional criteria for major depressive disorder. As noted in Section II, the definitions of individual mental disorders in *DSM*-5 consist of descriptions of symptoms, which constitute diagnostic criteria for the disorders. A mental disorder is

diagnosed by the psychiatrist when the patient meets the diagnostic criteria. This approach to diagnosis has been termed "ontological descriptivism" by the philosopher Jennifer Radden, because it characterizes mental disorders as clusters of observable symptoms without alluding to any underlying causal structures (2003, 41). The significance of this is that it suggests that the connections between the symptom criteria and their respective disorders are definitional. A person, who satisfies the symptom criteria for a given disorder for the required period of time, has that disorder by definition.

Under *DSM*-5, the diagnosis of major depressive disorder requires the person to exhibit at least five out of the following nine symptom criteria over a period of 2 weeks, with at least one of the symptoms being depressed mood or markedly diminished interest:

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report. . . or observation made by others.
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
3. Significant weight loss when not dieting or weight gain. . . or decrease or increase in appetite nearly every day.
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day.
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt.
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day.
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide (American Psychiatric Association, 2013, 160–161).

As well as comprising the diagnostic criteria for major depressive disorder, the above symptoms also comprise the diagnostic criteria for a depressive episode in the context of bipolar disorder. The diagnosis of bipolar disorder is distinguished from the diagnosis of major depressive disorder by the requirement of a manic or hypomanic episode. A manic episode is defined in *DSM*-5 as a "distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently goal-directed behavior or energy, lasting at least one week and present most of the day, nearly every day (or any duration if hospitalization is necessary)," whereas a hypomanic episode is defined in *DSM*-5 as a "distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy, lasting at least four consecutive days and present most of the day, nearly every day" (American Psychiatric Association, 2013, 124).

Of particular interest regarding the *DSM*-5 operational definition of major depressive disorder is the ninth criterion, namely, "recurrent suicidal ideation

without a specific plan, or a suicide attempt or a specific plan for committing suicide" (American Psychiatric Association, 2013, 161). The presence of suicidality on its own is neither necessary nor sufficient for an affective disorder diagnosis. Nonetheless, being suicidal does make it easier to satisfy the threshold for an affective disorder diagnosis. This is a generalization that follows from the mere fact that suicidality is one of the criteria for an affective disorder diagnosis and so counts toward the diagnosis by definition. Such a definitional connection partly accounts for why affective disorder diagnoses are commoner among people who exhibit suicidal behaviors than among people who do not.

The above can be spelled out more clearly with a hypothetical example. Consider person *A* and person *B*, who resemble each other in almost all respects, except that *A*'s case is characterized by the presence of suicidality, whereas *B*'s case is characterized by the absence of suicidality. According to *DSM*-5, the diagnosis of major depressive disorder requires five out of a list of nine symptom criteria. Person *A* already satisfies one of the criteria for a diagnosis of major depressive disorder, namely, suicidality, whereas person *B* satisfies none. Accordingly, *A* requires only four more symptoms to meet the criteria for a diagnosis of major depressive disorder, whereas *B* requires at least five more symptoms. If we introduce further depressive symptoms one by one in both *A* and *B*, then *A* would satisfy the criteria for a diagnosis of major depressive disorder before *B*. Therefore, the presence of suicidality makes it easier for *A* to meet the criteria for a diagnosis of major depressive disorder than *B*, inasmuch as *A* requires fewer additional symptoms to reach the diagnostic threshold than *B*. Importantly, this is a conclusion that is derivable a priori from the fact that the *DSM*-5 diagnosis of major depressive disorder requires five or more criteria to be met and from the fact that suicidality is one of these criteria.

This is not to say that such a conceptual connection is the only reason why suicidality is associated with a higher chance of being diagnosed with an affective disorder. Some researchers investigating the link between mental disorder and suicide have been careful to exclude the criterion of suicidality from the diagnostic process and have demonstrated that an association between the two holds despite this exclusion (Handley et al., 2012). It is plausibly the case that some of the symptoms of major depressive disorder reinforce each other via causal relations, so that having one symptom nonaccidentally raises the chances of also having other symptoms. For example, "fatigue may lead to a lack of concentration, which may lead to thoughts of inferiority and worry, which may in turn lead to sleepless nights, thereby reinforcing fatigue" (Cramer et al., 2010, 140–141). Likewise, suicidal ideation may reinforce and be reinforced by depressed mood and feelings of worthlessness or guilt, which would suggest that suicidality increases the probability of an affective disorder diagnosis because it increases the chances of other depressive symptoms also being present. Nonetheless, my

contention is that even without such causal relations between symptoms, the presence of suicidality would make a diagnosis of an affective disorder more likely simply in virtue of the fact that it is one of the criteria that counts toward the diagnosis. Therefore, this criterial connection is one reason, albeit not the only reason, why affective disorder diagnoses are likely to be commoner among people who exhibit suicidal behaviors than among people who do not.

In addition to the affective disorders, another common diagnosis that includes suicidality among its diagnostic criteria is borderline personality disorder. This is characterized as involving "a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts" (American Psychiatric Association, 2013, 663). Under *DSM*-5, the diagnosis of borderline personality disorder requires the person to exhibit at least five out of the following nine symptom criteria:

1. Frantic efforts to avoid real or imagined abandonment.
2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.
3. Identity disturbance: markedly and persistently unstable self-image or sense of self.
4. Impulsivity in at least two areas that are potentially self-damaging.
5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior.
6. Affective instability due to a marked reactivity of mood.
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger.
9. Transient, stress-related paranoid ideation or severe dissociative symptoms (American Psychiatric Association, 2013, 663).

A further requirement for the diagnosis is that the expression of this pattern of behavior must be "inflexible and pervasive across a broad range of personal and social situations" (American Psychiatric Association, 2013, 646).

Suicidality explicitly appears in the fifth criterion as "recurrent suicidal behavior, gestures, or threats" (American Psychiatric Association, 2013, 663). Again, while suicidality on its own is neither necessary nor sufficient for a borderline personality disorder diagnosis, being suicidal does make it easier to meet the threshold for a diagnosis of borderline personality disorder, due to the fact that suicidality is one of the criteria for such a diagnosis. Of course, there are also causal relations between the symptoms that increase the risk of suicide, such as affective instability and impulsivity making suicidal behavior more likely, but even without these, the presence of suicidality would count toward a diagnosis of borderline personality disorder in virtue of the way the diagnosis is operationally defined. Therefore, the association between borderline personality disorder and increased suicide risk is at least partly attributable to an explicit conceptual connection between the diagnosis and suicidal behavior.

The above examples of major depressive disorder and borderline personality disorder demonstrate how the *DSM*-5 definitions of some common psychiatric diagnoses establish an explicit conceptual connection between suicidality and mental disorder. Accordingly, the association between mental disorder and increased suicide risk is to some extent self-fulfilling, because suicidality is built into the definitional criteria for the aforementioned diagnoses. I conceded earlier that this is not the only reason why suicidality is associated with a higher probability of a diagnosable mental disorder being present, as it is plausible that suicidality could increase the chances of other symptom criteria also being present due to causal relations between them. Nonetheless, the above considerations do show that the association between mental disorder and increased suicide risk is not entirely due to a causal connection that can be straightforwardly assessed with appeal to empirical evidence but is partly a result of the way suicidality is contained in the *DSM*-5 definitions of some common psychiatric diagnoses.

At this point, it is important to address a potential objection, which is that the initial decision to include suicidality within the symptom clusters for some *DSM* diagnoses can be justified empirically. As conceded earlier in the discussion of major depressive disorder, suicidality does tend to cluster with other depressive symptoms in statistically significant ways. Accordingly, it is plausible that the initial consideration of suicidality as a symptom of major depressive disorder was informed by the empirical observation, perhaps aided by the statistical tool of cluster analysis, of its tendency to cluster with other symptoms.

I offer three replies to this objection. First, there is historical evidence suggesting that the influence of cluster analysis on the *DSM* was very limited. This is explicated by Roger Blashfield (1984), who notes that quantitative approaches, including cluster analytic studies, were largely disregarded by *DSM*-III committees due to methodological worries. Similarly, in a philosophical study of the *DSM*, which involved examination of material from the American Psychiatric Association's archive, Rachel Cooper (2005) notes that cluster analysis had little influence on the *DSM* classification system and became less significant as the *DSM* approach became more established.

Second, even if empirical observation had revealed suicidality to cluster with other depressive symptoms, what is philosophically significant here is the way in which suicidality was then codified as a formal criterion for the diagnosis of major depressive disorder. Suicidality is not merely considered to be a symptom associated with major depressive disorder in the way that, for example, headache is a symptom associated with influenza but constitutes part of the operational definition of major depressive disorder. Hence, while the initial observation that suicidality tends to cluster with other symptoms was an empirical observation, the way in which the diagnostic category of major depressive disorder was then built to incorporate suicidality as a formal criterion established a closer conceptual connection between suicidality and mental disorder. As we shall see in Section V, this is not without consequence,

as there is genuine concern that subsequent research on the association between suicide and mental disorder may be confounded by the ways in which the operational definitions of some common psychiatric diagnoses were subsequently made to incorporate suicidality as a formal criterion.

Third, even if there is empirical evidence that suicidality tends to cluster with other depressive symptoms, it does not follow that the decision to consider suicidality a symptom of major depressive disorder was wholly empirically determined. As noted by Cooper, "phenomena are too numerous and too rich for a scientist to be able to set about observing everything," and so before any empirical enquiry can begin, "the scientist must decide which features of the world are worth looking at" (2005, 93). There are numerous kinds of behavior aside from suicidality which could be empirically observed to cluster with depressive symptoms in statistically significant ways, including increased alcohol consumption and decreased libido, but unlike suicidality these are not included in the formal criteria for major depressive disorder. This suggests that the decision to specifically include suicidality in the criteria was not determined solely by empirical observation but also involved a nonempirical value judgment about suicidality being an important enough variable to consider. This might be informed by explanatory interests and, as I argue later in this paper, prior normative assumptions about the undesirability or abnormality of suicidal behavior. So, notwithstanding the empirical observation that suicidality tends to cluster with other symptoms, the decision to consider suicidality a variable worthy of study is still in want of a normative justification.

So far, I have considered cases where the conceptual connection between mental disorder and suicide is due to the explicit inclusion of suicidality as a diagnostic criterion in *DSM*-5. However, as suggested above, the conceptual connection also owes itself to a prior implicit judgment that suicidal behavior is mentally disordered behavior. As I show in Section IV, the putative categories of masked depression and suicidal behavior disorder reveal the tendency to attribute suicide to mental disorder, even when the diagnostic criteria for an established *DSM*-5 diagnosis are not met.

IV. SUICIDAL BEHAVIOR AS MENTALLY DISORDERED BEHAVIOR

Although suicidality is included in the *DSM*-5 diagnostic criteria for major depressive disorder and borderline personality disorder, its presence on its own is neither necessary nor sufficient for these diagnoses. Furthermore, as noted earlier, psychological autopsy studies report diagnosable mental disorders to be present in around 90 percent of suicide cases, suggesting that such diagnoses cannot be established in around 10 percent of suicide cases (Barraclough et al., 1974; Cavanagh et al., 2003). These considerations suggest that suicide can and indeed does sometimes occur in the absence of a *DSM*-5 psychiatric diagnosis.

However, even in the case where suicidal behavior is present but the conditions for a *DSM*-5 psychiatric diagnosis are not satisfied, there remains an eagerness to attribute the suicidal behavior to some kind of mental disorder. The language used by some scholars suggests the presupposition of a definitional connection between mental disorder and suicidality that extends beyond the explicit inclusion of suicidality as a diagnostic criterion in *DSM*-5. For example, the physician John Burnside states that "intent to commit suicide is prima facie evidence for a disease of the mind" (1998, 142). Similarly, Joiner et al. claim that "death by suicide among humans is an exemplar of psychopathology" (2016, 235). These statements are suggestive of a normative judgment that suicidal behavior is mentally disordered behavior. Furthermore, Burnside claims that "difficulty in assigning an appropriate DSM number in no way excuses failure to act on a fatal symptom" (1998, 142). This suggests that suicidality should be considered a mental health issue even if a *DSM*-5 diagnosis cannot be made.

To be clear, I am not claiming that all cases of suicide which do not satisfy the criteria for *DSM*-5 diagnoses are still judged to be mentally disordered. For example, requests for medically assisted dying on the grounds of suffering from progressive or terminal medical conditions are not typically considered to be mentally disordered. Hence, my claim can be limited to the cases of suicidal behavior that occur outside the specific context of terminal suffering. Indeed, Burgess and Hawton observe that while "attitudes towards voluntary euthanasia in certain cases such as terminal cancer appear to have become more liberal. . . there has been a contrary trend in psychiatric medicine with an increasing expectation for psychiatrists to prevent suicide" (1998, 113). Such a tendency is not limited to a small number of psychiatrists but, as we shall later see, is implicit in the American Psychiatric Association's consideration of suicidal behavior disorder in the appendix of *DSM*-5. Furthermore, as will also become clear, the tendency to consider suicidal behavior to be mentally disordered behavior cannot always be attributed to suicidality's being embedded in a wider psychiatric syndrome, because the putative category of suicidal behavior disorder is specifically supposed to capture suicidal behavior which is not embedded in a cluster of other psychiatric symptoms.

This tendency to attribute suicidality to a mental disorder even in the absence of a *DSM*-5 diagnosis is evidenced by the ways in which suicide victims who had exhibited no depressive symptoms are often retrospectively suggested to have had masked depression and, as noted above, by the proposal to include the category of suicidal behavior disorder in future diagnostic classification systems. Let us begin with the label of masked depression. This is a putative diagnosis that is given to a person who does not display any typical depressive symptoms but is nonetheless assumed to be depressed. The conjecture is that depression is present but manifests as symptoms that are not recognized as depressive. Rather than suffering from

typical depressive symptoms, people diagnosed with masked depression tend to present with somatic symptoms, such as backache and headache. Such cases have been called "depressions without depression—'depressio sine depressione'" (López Ibor, 1972, 246). Importantly, masked depression is not included as an official category in *DSM*-5. Hence, a patient who does not satisfy the conditions for a *DSM*-5 diagnosis may still be diagnosed with a mental disorder, namely, masked depression.

The category of masked depression is controversial. It has been remarked that masked depression is not a distinctive kind of syndrome but a vague category that can be used to accommodate a diverse range of clinical presentations (Modai, Bleich, and Cygielman, 1982; Razali, 2000). This is not intended to cast doubt on whether the symptoms associated with these clinical presentations are genuine or serious, but to point out that the label of masked depression that is sometimes applied to these diverse clinical presentations is lacking in specificity and clear boundaries. Sometimes, the label might be used to describe cases in which depressed mood is absent but which nonetheless satisfy the diagnostic criteria for major depressive disorder. For example, a person might lack depressed mood but have diminished interest in conjunction with at least four other symptoms. However, it may sometimes also be used to describe cases which do not fully meet the diagnostic criteria for major depressive disorder. For example, in their discussion about masked depression in men, Rabinowitz and Cochran comment that "masculine-specific modes of experiencing and expressing depression often do not match up with the criteria detailed in the *DSM-IV-TR*" (2008, 567). Hence, masked depression presents an example of the sort of case suggested by Singh and Sinnott-Armstrong where the definition of mental disorder is sufficiently flexible for a patient to be told, "yes, you have a mental disorder that is not (yet?) in DSM-5" (Singh and Sinnott-Armstrong, 2015, 8).

The following case report by Juan José López Ibor presents an example of masked depression being invoked to account for a suicide attempt which had occurred in the absence of a discernable psychiatric syndrome:

> All that the patient said was that she had been suffering from some "strange" headaches, which had begun some months previously, and which she had treated with the usual analgesics. One day . . . she told her mother, who happened to be in the house, that she was going to the bathroom to wash her hair. Her mother heard the water running for a short time; after a few minutes of silence she heard a strange noise a bathroom stool that had fallen over. She ran to the bathroom door to see what was happening, and was horrified to discover that her daughter had hanged herself; using a nylon clothes-line . . . we quickly appreciated the fact that she was depressed and that the attempt at suicide was the consequence of her depression, which until then had not been apparent to the members of her family, to her family doctor or even to the neurologist who had examined her. Frequent headaches were the only disturbance that the patient had been complaining about for some months

past. There is no better name for this case than that of *masked depression*. (1972, 245)

There is some ambiguity in the phrase "we quickly appreciated the fact that she was depressed," as it is unclear whether the patient was judged to have masked depression based on her headaches and suicide attempt or whether other depressive symptoms became manifest following her suicide attempt. Given that López Ibor emphasizes that headaches were "the only disturbance that the patient had been complaining about" and that the case is presented in the context of a discussion about cases "in which the typical symptoms do not appear" (1972, 245), a defensible case for assuming the former interpretation can be made. This would suggest that the suicide attempt was attributed to a mental disorder, namely, masked depression, even though the patient did not satisfy the criteria for an established psychiatric diagnosis. Nonetheless, even if the latter interpretation remains plausible in the above case, this kind of interpretation cannot so easily be applied in the sorts of case noted below.

In a study undertaken by the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2017) in the United Kingdom, it was reported that a number of young people who had died from suicide had no symptoms of major depressive disorder or of any other diagnosable mental disorders. Given that these particular suicide victims also had significantly fewer of the known risk factors for major depressive disorder and other psychiatric disorders compared to the sample of suicide victims as a whole, their suicides were labeled "out of the blue" deaths. In December 2017, the psychiatrist Louis Appleby, who is the director of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, delivered the President's Lecture at the Royal College of Psychiatrists, in which he discussed the tendency in contemporary psychiatric discourse to attribute these "out of the blue" deaths to masked depression. Speaking about the reactions to the unexpected suicide of the Linkin Park singer Chester Bennington, Appleby states

> Lots of people talked about it and their general conclusion was that it is evidence of masked depression, the self-fulfillment that's intrinsic to psychiatry. Depression's there really, but it's masked depression. I'll just suggest to you that there's an alternative explanation and that is he wasn't depressed at all. (2017, 44:00–44:20)

Appleby suggests that this kind of suicide may be associated with rapidly escalating despair rather than with a genuine depressive disorder. However, as he notes, there remains a common presupposition in psychiatry that "if he took his own life, then he must have been depressed really." The label of masked depression is sometimes invoked in order to accommodate this presupposition.

The above contention in no way downplays the seriousness of the distress experienced by the victim of an "out of the blue" suicide. It also does not downplay the importance of intervening to support the person and prevent the escalation of suicidal behavior. Rather, it is intended to highlight the tendency to classify this distress as a symptom of a mental disorder, even when the conditions for a formal psychiatric diagnosis are not met. This is suggestive of an implicit normative assumption that that suicidal behavior is mentally disordered behavior, thus further supporting the claim that the connection between mental disorder and suicide is not wholly empirical.

Let us now turn to the category of suicidal behavior disorder. This is a putative diagnosis that is not currently used but appears in *DSM*-5 under the section on "Conditions for Further Study" (American Psychiatric Association, 2013). Regarding the proposed criteria for the diagnosis, *DSM*-5 suggests the following:

A. Within the last 24 months, the individual has made a suicide attempt.
B. The act does not meet criteria for nonsuicidal self-injury.
C. The diagnosis is not applied to suicidal ideation or to preparatory acts.
D. The act was not initiated during a state of delirium or confusion.
E. The act was not taken solely for a political or religious objective (American Psychiatric Association, 2013, 801).

Furthermore, *DSM*-5 states that the level of planning, the chosen method, and degree of ambivalence "should not be considered in assigning the diagnosis" (American Psychiatric Association, 2013, 801). This proposed diagnostic category would accommodate those cases of attempted suicide that do not satisfy the conditions for more established *DSM*-5 diagnoses, such as affective disorders and borderline personality disorder.

The proposed inclusion of suicidal behavior disorder in a future diagnostic classification system has been defended by some psychiatrists on scientific grounds. Oquendo and Baca-Garcia (2014) suggest that suicidal behavior has sufficient antecedent, concurrent, and predictive validators to qualify as a nosologically valid category. These validators include various social, psychological, and biological factors associated with suicidal behavior. Naji Salloum (2017) appeals to the various neurobiological markers involving the serotonin system, the hypothalamic-pituitary-adrenal axis, and the kynurenine pathway, which have been correlated with suicidal behavior. However, it is not clear whether these neurobiological markers are causally involved in suicidal behavior, whether they are the consequences of suicidal behavior or whether they are mere correlates of suicidal behavior (Pandey, 2013).

If suicidal behavior turns out to have robust antecedent, concurrent, and predictive validators, then this would be significant for the purposes of explanation and prediction. However, this does not sufficiently account for why suicidal behavior occurring in the absence of other symptomatology is considered to be a psychiatric issue in the first place. Many of our behavioral

states are associated with robust antecedent, concurrent, and predictive validators but are not judged to be disordered. For example, in a satirical article entitled "A Proposal to Classify Happiness as a Psychiatric Disorder" (1992), Richard Bentall notes that happiness is statistically atypical in the population, consists of a distinctive cluster of symptoms, and is associated with a range of characteristic biological and psychological markers, but we do not consider these empirical findings sufficient to justify the medicalization of happiness as "major affective disorder, pleasant type" (Bentall, 1992, 94). Hence, empirical data can clarify the causal structure of a given behavior, but the normative judgment about whether or not this behavior constitutes a mental disorder is informed by other considerations, such as value judgments about harmfulness and unacceptability (Wakefield, 1992; Cooper, 2005). Derek Bolton notes

> Often enough the judgment is *already* made that such and such is a disorder, and then it is supposed (on more, less, or no evidence) that there must be a disease or lesion somewhere in the brain, of some kind, that will be found with the right technology, tomorrow or in the next millennium. In other words, the judgment of disorder is typically made *on other grounds*—such as radical incomprehensibility or social unacceptability—and the objective basis for the condition is then assumed. (2000, 145)

This suggests that empirical data regarding the antecedent, concurrent, and predictive validators of suicidal behavior may support the decision to lump cases of suicidal behavior under a single category, rather than split them among multiple categories, but the fact that suicidal behavior occurring in the absence of other symptomatology was specifically considered to be an issue for psychiatric classification in the first place indicates a prior implicit judgment that suicidal behavior is mentally disordered behavior.

The inclusion of suicidal behavior disorder in a future diagnostic classification system would result in a far greater number of people with suicidal behaviors receiving formal psychiatric diagnoses. Of course, as noted above, suicidal behavior disorder is not currently included as a formal diagnostic category in *DSM*-5. Still, the proposal to introduce it as a future diagnostic category is significant because it suggests an eagerness in contemporary psychiatry to attribute suicidal behavior that does not currently meet the criteria for established *DSM*-5 diagnoses to some kind of mental disorder nonetheless. Furthermore, as noted earlier, the proposal to consider suicidal behavior disorder as a future diagnostic category suggests that the tendency to consider suicidal behavior to be mentally disordered behavior cannot always be attributed to suicidality's being embedded in a wider psychiatric syndrome. This is because the category of suicidal behavior disorder is specifically supposed to capture isolated suicidal behavior which is not embedded in a cluster of other psychiatric symptoms and which does not satisfy the criteria for a more established psychiatric diagnosis. Hence, the

American Psychiatric Association's consideration of this putative diagnosis reflects a judgment that suicidal behavior, which does not occur in the contexts of medically assisted dying, political protest, or religious practice, is mentally disordered in its own right, even when not accompanied by other symptoms.

V. EPISTEMOLOGICAL AND NORMATIVE ISSUES

The above discussion reveals the complexity of the connection between mental disorder and suicidal behavior. The connection is likely to be at least partly causal, as demonstrated in Section II by the example of schizophrenia. However, the examples discussed in Sections III and IV show that the connection is not wholly causal but also partly conceptual. This raises some interesting epistemological and normative issues, which I discuss below.

One implication of the conceptual connection between mental disorder and suicide is that there is some circularity in invoking a mental disorder diagnosis as a causal explanation of suicidal behavior. This circularity is most obvious in the case where suicidality constitutes part of the definitional criteria for the mental disorder. This is not to claim that mental disorder causes suicidal behavior is completely circular. As noted in Section II, suicidality is not included in the diagnostic criteria for all disorders. Furthermore, as noted in Section III, there are plausibly some causal relations between the various symptoms of major depressive disorder that increase the likelihood of suicidal behavior developing. Rather, my contention is merely that it yields an explanation that is partly circular. A claim such as "*A* is suicidal because *A* has major depressive disorder" may be partly causal in virtue of how the depressive symptoms causally reinforce each other, but it is also partly circular, given that suicidality constitutes part of the diagnosis of major depressive disorder.

At initial glance, this does not seem to fit comfortably with some of the traditional philosophical discussions of causal explanation. For example, David Lewis proposes that causation is to be analyzed "in terms of counterfactual dependence between distinct events" (1986, 191), whereas Neil Williams suggests that "in an instance of causation the cause is distinct from its effect(s) is common knowledge (among philosophers, anyway)" (2011, 163). However, the way in which suicidality is built into the operational definition of major depressive disorder casts doubt on whether the two are sufficiently distinct events for the latter to serve as a causal explanation of the former.

There are different ways in which we might address this issue. One option is to claim that the diagnosis of major depressive disorder is not a genuine causal explanation of suicidality, because it does not meet the distinctiveness requirement. This is the option taken by Thomas Szasz in "The Myth of Mental Illness":

This is obviously fallacious reasoning, for it makes the abstraction "mental illness" into a cause, even though this abstraction was created in the first place to serve only as a shorthand expression for certain types of human behaviour. (1960, 114)

According to this approach, psychiatrists are mistaken to invoke the diagnosis of major depressive disorder as an explanation of suicidality.

However, another option is to revise and expand our philosophical analysis of causal explanation to accommodate the explanatory claims of psychiatrists. While causation per se may be a relation between distinct events, it could be contended that causal explanation does not require the *explanans* to be wholly distinct from the *explanandum*. The *explanans* may make reference to the *explanandum*, but it may still be considered to comprise a genuinely causal explanation so long as it also refers to other information that is causally relevant to the *explanandum*. Indeed, as noted by Lipton and Thompson (1988), explanations in evolutionary biology are often recursive in this manner. For example, in response to the question "why are polar bears white?," the answer "because there is a force in the environment that makes them white," makes reference to whiteness but is nonetheless a causal explanation because the restatement of the whiteness is embedded in a larger structure which includes information that is causally relevant to the whiteness (Lipton and Thompson, 1988, 219–220). Under this analysis, major depressive disorder could still qualify as a causal explanation of suicidality despite its including suicidality among its criteria, because it also refers to other symptoms which may be causally relevant to the development and maintenance of suicidality, such as depressed mood and feelings of worthlessness or guilt.

Another implication of the conceptual connection between mental disorder and suicide concerns the nature of hypothesis testing in science. As noted earlier, the claim that suicide is associated with mental disorder is often depicted as being a hypothesis that can be confirmed or falsified by empirical evidence. However, the inclusion of suicidality in the definitional criteria for such diagnoses affords the hypothesis with some degree of protection from falsification, because it makes the association between mental disorder and increased suicide risk somewhat self-fulfilling. Some further protection from falsification may also be provided by the putative diagnoses that can be invoked to accommodate cases of attempted or completed suicide that do not meet the criteria for established *DSM*-5 diagnoses. It might be expected that a case of attempted or completed suicide in the absence of a *DSM*-5 diagnosis would constitute an instance of disconfirming evidence for the hypothesis that suicide is associated with mental disorder. However, instead of conceding that the absence of a *DSM*-5 diagnosis constitutes an instance of disconfirming evidence for the hypothesis, the putative category of masked depression could be invoked to maintain that the person's suicidality was associated with some kind of mental disorder.

This may be defensible to some extent. As argued by Imre Lakatos, resistance to falsification is a fairly typical feature of a scientific theory:

> Scientists have thick skins. They do not abandon a theory merely because facts contradict it. They normally either invent some rescue hypothesis to explain what they then call a mere anomaly or, if they cannot explain the anomaly, they ignore it and direct their attention to other problems. (1977, 4)

The putative category of masked depression may serve as such a rescue hypothesis that can be used to accommodate some cases of suicide that do not meet the criteria for any established *DSM*-5 diagnoses, thus supporting the claim that suicide is associated with mental disorder. The defensibility of this practice would depend on whether the rescue hypothesis itself can be independently justified. However, the protection from falsification that is afforded by the inclusion of suicidality in the definitional criteria for some diagnoses is more worrying, because it could confound the results of subsequent research into the relations between these diagnoses and suicide risk. Indeed, this worry has been expressed by public agencies involved in developing mental health policies. For example, consider the following passage from a review commissioned by the Scottish Government on suicide intervention:

> Whilst a number of studies . . . have cited the apparently close association between personality disorder and likelihood of suicide, estimates of lifetime prevalence of suicide in this disorder commonly fail to take into account that suicidal behaviour remains one of the defining criteria for a diagnosis of personality disorder. Without controlling for this definitional circularity[,] it is difficult to establish the true association between this disorder and suicidal behaviour and hence to establish what the appropriate balance of research effort should be. (Leitner et al., 2008, 158)

Similarly, in a National Institute for Clinical Excellence guideline on self-harm, it is noted that there "is an unhelpful circularity in that self-harm is considered to be one of the defining features of both borderline and histrionic personality disorder" (2004, 22). Therefore, there is genuine concern among public agencies that the self-fulfilling nature of the association between suicidality and mental disorder compromises the quality of the research on suicide causation.

The above discussion suggests that the claim that suicide is associated with mental disorder is not a straightforward empirical claim that can be justified solely by appealing to the observed correlation between the two. To do so would be to beg the question somewhat, because it is already presupposed prior to such observation that suicidality is a symptom of mental disorder. A more complete justification also requires a defense of this presupposition on conceptual and normative grounds. That is to say, a reason must be given for why suicidal behavior is judged to be mentally disordered behavior in the first place. For the reason of scope, I do not offer a complete justification

in this current paper. Nonetheless, I briefly consider two analyses from the philosophical literature on mental disorder which help to highlight the kinds of consideration that are likely to be relevant to such a justification. These are the analysis of irrationality by Culver and Gert (1982) and the harmful dysfunction analysis by Jerome Wakefield (1992).

Culver and Gert (1982) note that discussions about mental disorder tend to be discursively associated with judgments about irrationality, and so they believe that a clearer conceptual understanding of irrationality can be of great import to the understanding of mental disorder. Specifically, they are interested in the ordinary language sense of "irrationality," which they suggest is normative, inasmuch as labeling something as irrational "is to express an unfavorable attitude towards it" (Culver and Gert, 1982, 20). According to their proposed definition, "irrational action consists of harming oneself without an adequate reason" (Culver and Gert, 1982, 26–27). Here, "harming oneself" means "causing (or not avoiding) some evil for oneself," where an "evil" encompasses death, pain, disability, and the loss of freedom, opportunity, or pleasure (Culver and Gert, 1982, 27). An "adequate reason" means "a reason that is adequate to make some self-harming action rational" (Culver and Gert, 1982, 30). Such reasons might include the relieving of harms or the gaining of goods for oneself or for others.

Under this analysis, many cases of suicidal behavior would be deemed irrational, inasmuch as they involve people harming themselves without what are considered to be adequate reasons. Furthermore, a strength of this analysis is that it distinguishes those cases of suicidal behavior which are typically considered irrational from those which are typically considered rational. For example, requests for medically assisted dying in the context of terminal illness and self-sacrificial acts to help others in contexts such as rescue or combat could be deemed rational, inasmuch as the reasons for them may be considered to be adequate in the given contexts.

A different philosophical analysis is offered by Wakefield (1992), who is specifically interested in what distinguishes states considered to be disordered from states considered to be healthy. He offers the following account, which he calls the harmful dysfunction analysis:

> A condition is a disorder if and only if (a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and (b) the condition results in the inability of some internal mechanism to perform its natural function, wherein natural function is an effect that is part of the evolutionary explanation of the existence and structure of the mechanism (the explanatory criterion). (Wakefield, 1992, 384)

According to the harmful dysfunction analysis, a value judgment about harmfulness and an empirical fact about biological dysfunction are jointly necessary for something to be a disorder. The analysis assumes an etiological account of function based on evolutionary theory, according to which a

function of a part of an organism is a mechanism that had contributed to the survival and reproduction of the organism's ancestors and hence to the evolutionary transmission of that mechanism to the present organism.

Under this analysis, suicidal behavior would qualify as a disorder if and only if it involves such a harmful dysfunction. Plausibly, many cases of suicidal behavior satisfy the value criterion, inasmuch as they are judged by cultural standards to be harmful. Whether they satisfy the explanatory criterion is more dubious, but it could be speculated that at least some cases are dysfunctional because they involve failures of psychological modules normally associated with the desire to remain alive and the behavioral disposition to avoid death. Again, these criteria could help to distinguish those cases of suicidal behavior which are typically considered disordered from those which are not.

The above analyses are not unproblematic. For example, even if it is granted that suicidal behavior is irrational and that irrationality is unfavorable, this is not sufficient to account for why it is considered specifically to be a psychiatric issue, rather than a social issue or a moral issue. After all, not all behaviors which are deemed irrational are considered to be mentally disordered. Regarding the harmful dysfunction analysis, some philosophers have argued that there are problems with basing an account of disorder on the notion of biological function, such as the value ladenness of function ascription and the underdetermination of function ascription by the available empirical evidence (Bolton, 2000; Cooper, 2005). Nonetheless, despite these challenges, the above analyses are valuable for highlighting some of the considerations that are potentially relevant to a normative justification of the claim that suicidal behavior is mentally disordered behavior.

VI. CONCLUSION

I have argued that the connection between suicide and mental disorder is more complex than is often supposed. Plausibly, part of the association can be attributed to the causal contribution of psychiatric suffering to increased suicide risk, which can only be appreciated through empirical inquiry. However, the overall connection is not wholly causal but is partly conceptual and normative. The conceptual connection manifests explicitly in the way suicidality is built into the definitional criteria for some common psychiatric diagnoses. The normative judgment that suicidal behavior is mentally disordered behavior is evident more implicitly in the eagerness to attribute suicide to some kind of mental disorder, even when the criteria for an established psychiatric diagnosis are not met. The above suggests that there is often some degree of circularity in invoking mental disorder as a causal explanation for suicidal behavior, particularly in the case where the suicidal behavior constitutes part of the operational definition for the diagnosis. It also suggests that the hypothesis that suicide is connected with mental disorder

is somewhat resistant to empirical falsification, because the diagnostic concepts that are assumed already presuppose that suicidality is a symptom of mental disorder. Therefore, the claim that suicide is connected with mental disorder cannot be justified simply by appealing to the empirical observation that the two are correlated, but a philosophical justification is also warranted on conceptual and normative grounds for why suicidal behavior is considered a form of mentally disordered behavior in the first place.

CONFLICT OF INTEREST

As the author of this manuscript, I declare that I have no conflict of interest.

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