‘LIVING WITH BIPOLAR OR SOMETHING LIKE IT ‘-

A DESCRIPTIVE, PHENOMENOLOGICAL, PSYCHOLOGICAL EXAMINATION OF ANOMALOUS TEMPORAL EXPERIENCES IN CASES OF SUSPECTED MOOD DISORDER

JACK THOMPSON

2022

Title

‘Living with bipolar disorder (BD) or something like it’.

The strongest of all warriors are these two: Time and Patience. (Tolstoy, ‘War and Peace’, 1869). “It is in you, o my mind, that I measure time”….(Augustine Confessions 1993,p.25)

Abstract

The aim of this study was to gain a better understanding of the relationship between temporality, Bipolar Disorder (BD) and other similar mood disorders by identifying with the psychological and subjective structures that underpin that relationship, with a view to distinguishing any possible commonalities or differences between various features of similarly related disorders, observed within the participants ’conscious experiences. An examination of Anomalous World Experience (EAWE) framework was used for the interviews, using the ‘time and events ’ domain only, (Sass et al 2017), and the data was analysed adopting (Giorgio & Giorgio’s 2017) descriptive phenomenological psychological framework. There were six participants whose descriptions of temporal anomalies were analysed qualitatively, with varying and similarly minded results. Alterations to the temporal structure and the organisation of time were evident within all the descriptions, although this was demonstrated in heterogeneous ways. Although the sample size was limiting and the participants were viewed independently, there was evidence of a number of common factors, including the appearance of slowing and speeding of time. The EAWE is intended to be broad based. The data suggests the structure and organisation of time, after a traumatic

experience, continues to elicit temporal, mood and emotionally related disturbances and incoherence over time. The exact relationship between time in identifying specific features indicative of certain disorders is a little way off, although the conclusion is that temporal disorder is an essential aspect of trauma related experiences. In cases where a possible psychosis was identified there was no clear evidence that any sense of the self had experienced a temporal fragmentation and so it was likely that any psychosis was more likely to be linked with BD than with schizophrenia. There was no evidence of any instability of pre-reflective self-awareness, which is a core, generative feature of schizophrenia.

Acknowledgments

I would like to thank Silenus University for the opportunity to submit this dissertation in October 2022. I am grateful to them for allowing me to complete the final part (the last twelve months) of the final stage of the process, (the last three years,), a process which in its entirety has lasted twelve years, (a process which first started with South Wales University in 2010). Without the framework and support of Silenus, it could not have been completed or submitted. I would also like to thank my son Morgan for helping and supporting me through the final stages of the submission, by assisting in the administration of it. Again, without his help and support the dissertation could not have been completed on time.

Structure of the research

Chapter 1: Introduction

1. Inttroduction
2. Research aim
3. Research objectives
4. Motivation and context
5. Operationalising the diagnosis
6. Root of the problem
7. Advantages and disadvantages of the study
8. Limits of first and third person approaches to social understanding
9. Contribution to knowledge

Chapter 2: Literature Review

Introduction

Part 1

Section 1: Classification

1. History and culture
2. Modern classification
3. Clinical constraints
4. Classification and bipolar
5. Diagnostic classification
6. New classifications

Section 2: Reliability and validity

1. The soft underbelly
2. Standardising the system
3. What is inter rate reliability? (IRR)
4. Reliability of data and interview process
5. Reliability and mood disorder diagnosis

Section 3: Misdiagnosis

What is meant by misdiagnosis?
Why is misdiagnosis so prevalent?
Accounting for misdiagnosis
Sub threshold symptoms and mixed features
Summary

Part 2: Mood disorders

Section 1: Re-operationalising the diagnosis

1. Mood disorder and cognition
2. Situated cognition
3. Mood and anxiety
4. Mood and fear
5. The subjective and experiential nature of moods
6. The distinction between normal and abnormal moods
7. Bordering on normality and abnormality
8. Mood disorders and the continuum concept

Section 2: Commorbidity and the continuum conundrum

1. The problem of commorbidity, the rule not the exception
2. Implications for diagnosis
3. Solutions to the conundrum
4. A transdiagnsotic approach to commorbidity
5. Hierarchical Taxonomy of Psychopathology
6. Transdiagnosis and bipolar disorders
7. Summary

Section 3: A dimensional approach to mood disorders

1. The healthcare setting, reliability and diagnosis
2. A return first, to categorisation and standardisation
3. Dimensionality and mood as a continuum
4. Phenomenology as an alternative perspective
5. Challenges to dimensional research

Part 3: Temporality

Section 1: Temporality and dynamical cognition

1. An introduction

Section 2: Phenomenology and the temporal expereince

2. Pheneomenology and the temporal expereince

3. A brief history of the temporality of early psychiatry - Minkowski, Jaspers, Binswanger and Tellenbach
4. Bridging the temporal gap
5. Temporality, emotion and mood
6. Temporality and embodiment
7. Temporality, and attunement

Section 3: Mood disorders, disturbances and temporal change

1. Mood disorders, disturbances and temporal change
2. Psychopathological mood and temporal challenges
3. Temporality and borderline personalityb disorder (BPD0
4. Temporality and anxiety disorders
5. Summary

Chapter 3: Methodology

1. Varieties of pheneomenology
2. A glimpse into realism, idealism and empiricism
3. Phenomenology, a valid scientific methodology
4. Husserl’s basic phenomenology
5. Idealism, realism and empricism revisted
6. The historical foundation of time and reality
7. Physical and objective time and duration
8. Inner time consciousness: the basic cliam of Husserl
9. Structure of time
10. Phenomenology and the natural attitude
11. Epoche and the process of transcendental reduction
12. Lived and self conscious and reflective conscious experience

13. Hussrerl’s intentionality
14. Emboidiment, volition and nature
15. Intersubjectvity and the mind world
16. The intenional arc and maximal grip
17. Ontological structure of mood
18. Mood, anxiety and cognition
19. Mood and biological anxiety
20. Mood, affectivity and emotion
21. Summary

Chapter 4: Method

1. A method of description
2. Empathy
3. Introspection and description
4. First, third and second person perspectives
5. The interviewing standard
6. The Examination of Anomalous World Experience

The research process

1. Event and participation
2. Sample size
3. Informed consent
4. Operationalising the interview process
5. Operationalising the data collection
6. Ethical practice
7. Summary

Chapter 5: Analysis, findings and discussion

Analysis

1. The descriptive phenomenological psychological method
2. Trusting the data
3. Observation of the data
4. Analysis of the data following Giorgio's 4 step process

The findings

1. Background and history
2. Time sand events
3. Mood and atmosphere
4. Common themes
5. Differences between participants' experiences
6. Similarities between participants' experiences
7. The identification of subjective temporal stuctures

Discussion

1. Temporal structures, meaning and teh most essential aspects
2. Lived time and experience
3. Relationship with mainstream diagnostic criteria
4. Clinical implications

Chapter 6: The conclusions

1. Conclusions
2. Future research opportunities

Chapter 1: Introduction to the research

Introduction

Any question of time can at first be baffling. A conundrum nonetheless that is suited to continental phenomenology in the tradition of Husserl, Heidegger and Merleau Ponty, see (Sass & Parnas 2013, Fuchs 2019). Historically, time, when examined psychologically and philosophically, within a psychiatric context has tended to have been done so quantitatively, objectively, seen through a traditional realist subject-object lens (Fuchs 2013). Consequently, a clinician will tend to measure a duration of some kind objectively and empirically, and without any subjective measure to guide it. The notion of subjectivity and how it is structured within an experiential and temporal context, is often overlooked, but plays a key part in this research study. Subjectivity and with it, inter subjectivity, remains an essential characteristic and fundamental dimension of our daily temporal experiences, which we have much to learn about.

A close examination of the disruptions of time and how these disruptions relate to human consciousness, can help us identify with the relationship between the psychological structures and the affects and emotions that support and underlie it. Identifying with the kinds of disturbances and modifications that affect a person’s temporal relationship with the world remains a useful line of enquiry if we are to gain a better understanding of both consciousness and mood disorders. (Gallagher & Lenzo 2020, Stanghellini 2016). Putting an emphasis on disorder and distortion compels us to go beyond describing a simple content filled conscious experience (Fuchs et al 2019) and try and better understand the division

and connection between (1) our inner perceptions of time (ie our experiential explicit reflections) and (2) our inner consciousness of time (i.e. our pre given tacit or implicit self awareness) (Fuchs 2005) as a means of understanding the underlying psychopathological structure of mental disorders. (Husserl 2001) relates to this problem, as needing to understand our capacity for subjective self awareness and to the link or relationship between our subject lived experiences (i.e. first person giveness of the experience) and the experiential type phenomena we encounter in an environment. Ontologically, we are not constituted as objects that can exist and experience things independently, we are in addition, as Heidegger reminds us existential, experiencing beings. That is to say, there is always something it is like for the subject having the experience to be conscious. (Nagel 1979). In this sense, prior to reflection of an experience one must have perceived the intentional object, and experienced the intentional act, (Fuchs 2005), though at this point one is not intentionally directed towards the thematised act, which happens on reflection, the act itself is nevertheless conscious, given implicitly. We reflect on things to bring the intentional act into focus. This is the purpose of this study. Since to reflect upon something it must be present in our minds, otherwise there would be nothing to motivate the act of reflection, i.e., of grasping something that has already been given to us prior to the grasping. Our reflection discloses our experiences, it does not produce them

Finally it is worth noting that time is a fundamental dimension of our daily life. A temporal approach to the study of anomalous experiences is thus fundamental and consequently can help to cut clinically across traditional rigid categorical boundaries, in order to observe mood and affect disorders more subjectively, from a first person perspective, and

not as discrete entities constituted by easily quantifiable signs and symptoms. In contrast mood disorders are considered to be constituted as an inter subjective, embodied and situated relationship, extended and enduring, (Vogel et al 2017, Fuchs 2013) between an experiencing subject on the one hand, and the world they inhabit and interact with others on the other. (Fuchs 2018, Gallagher & Zahavi 2010).

Research aim

1. The aim of this study was to gain a better understanding of the relationship between temporality, Bipolar Disorder (BD) and other similar mood disorders (Rosfort & Stanghellini 2009, Gallagher & Lenzo 2020), by identifying with the psychological and subjective structures that underpin that relationship, with a view to distinguishing any possible commonalities or differences between various features of similarly related disorders, (Saas & Pienkos 2013), observed within the participants 'conscious experiences.

Research objectives

1. To engage in a phenomenological and psychological analysis for evidence of anomalous experiences of time
2. To describe the participants 'lived and affective experiences of time subjectively and identify where possible, common shared temporal features of their experiences that may either overlap or converge under different conditions or experiences
3. To compare participants 'individual experiences of time subjectively, to determine which, if any, might be distinctive of a given mood disorder?

4. To identify, describe and analyse the psychological structures that support each specific disorder in each individual case, together with any common factors that might connect them

Motivation and context

Studying time as a fundamental dimension of subjectivity will enable a better understanding of its subjective nature, which can help improve the reliability and validity of diagnosis overall. The diagnostic classification of all mood disorders is a complex and dynamical process that is problematic for clinicians and researchers alike. Reported cases of mis-diagnosis is nonetheless reported as extensive, (Zimmerman 2008, Zimmerman 2012). The reasons are varied, but mistaking unipolar for bipolar is the most common (Mesbah et al 2020)

Mood disorders are responsible for 12% of the total burden of all disease and are associated with enormous personal, societal and economic costs. (Andrews 2009). This group of disorders includes both major depressive and bipolar disorder, with major depressive episodes being prominent in both. Major depressive disorder is the commonest mood disorder, with lifetime prevalence rates reported up to 16%. (Young & McPherson 2011). According to Ratheesh et al (2017's) outstanding meta-analysis, BD is exceedingly difficult to accurately identify; for about a quarter of patients with MDD, the diagnosis eventually changed to BPD. This is consistent with a study by Angst (see Angst 2017), which examined 406 patients with major mood disorders who were admitted to hospitals and were monitored seven times between 1963 and 1985. It discovered a persistent linear diagnostic change from MDD to BP-I disorder in 1% of cases per year and to BP-II disorder in 0.5% of cases

2. Given that BPD typically presents before the age of 35, such a linear progression is obviously unsustainable. Statistics can be erroneous, but the pattern is still present. (Rugero et al 2010, Shen et al 2018, Shum 2022, Perlis 2005, Singh & Rajput 2006).

Operationalising the diagnosis

Given the substantial heterogeneity or range of symptoms that characterises bipolar disorder, together with an overlap of psychotic and affective symptoms, mixed features and sub syndrome problems of identification, the concern for mis diagnosis remains a real one to patients and families first and foremost. (Mesbah et al al 2020). It is an ongoing and serious concern for classification authorities and practicing clinicians alike, as they aim to quantify and search for diagnostic operational consensus, in relation to what is essentially a very individual and personal qualitative experience.

So what goes wrong, and what can be done about it? The diagnosis of a mental disorder initially appears relatively straightforward. Patients present themselves with relatable symptoms or visible signs of illness and health professionals make diagnoses based primarily on these symptoms and signs. Consequently they prescribe a medication or, psychotherapy pathway, or both, accordingly. Even so, despite a dramatic expansion of knowledge about mental disorders during the past 70 years or more, our understanding of the components and processes that constitute mental health disorders remains rudimentary at best. (Clark et al 2017)

In order to increase the accuracy of diagnoses in both clinical and research settings, categorical operational diagnostic methods for psychiatric diseases were developed. These classifications have significant flaws, and some people cannot be properly categorised under a single group; instead, they are lumped together under the general category of "not otherwise specified." An alternate paradigm to the category technique is the dimensional approach. Instead of identifying individuals as belonging to discrete entities with distinct bounds, the dimensional technique distributes individuals along a gradient. Additionally, relevant information like impairment, severity, chronicity, and outcome may be included in a dimensional model. (Young & McPherson 2011)

Root of the problem

The strength of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, DSM-III-R and DSM-IV), the world's leading mental health authority, was to base psychiatric diagnoses on defined operational criteria, which resulted in high inter-rater reliability. However, a weakness, shown in relation to DSM-IV, was that it was only able to formally diagnose less than half the patients that were actually treated (Angst et al. 2010). This clinically unacceptable situation was derived partly from the lack of operationalised sub threshold diagnoses. In recognition of the fact that for a large group of patients receiving treatment clinicians often had no alternative to the residual, catch-all diagnosis not otherwise specified (NOS), DSM-5 (2013) now includes a new list of defined sub threshold syndromes, which has stimulated new research, allowing for a more multi dimensional view. Recurrent brief depression and even short-duration depressive episodes (4 to 13 days),

as well as 2-week episodes with insufficient symptoms, now have their place. (see Angst 2013)

Starting from 1930's, research in mental health disorders in general have informed us that psychiatric diagnosis rarely appears to be definite and that clinicians often had difficulties in coming to a consistent agreement on the same diagnosis for the same person (Demazeux, 2013). This problem was put down to the rise of psychoanalysis and its great success, starting with Freud. Rustin (1997) has recently attempted to conceptualise this view, by proposing that psychoanalysis is a combination of mental well being and healing and natural science. The differentiation between good and bad science should be made from the point of view of the standards of the particular scientific community in which it is undertaken as opposed to some universal 'gold-standard ' concerning what constitutes good science. (Lees 2005). (Cooper & Blashfield 2015) note: DSM-I was viewed as a psychoanalytic classification. There are four reasons to challenge this belief. Firstly, psychoanalysts of the time did not use DSM-I and it was as infused with Kraepelinian concepts as much as it was with psychoanalytic ones. The adoption of the psychoanalytical framework nonetheless, in American psychiatry led to "a significant de-emphasis," on the one hand "on diagnosis and nosology", and on the other hand "on careful observation of signs and symptoms" (Andreasen, 2007, p. 110). All this resulted in the psychiatric diagnosis appearing to be sporadic and almost exclusively dependent on the individual analytical capacities of the clinician. It is in order to regain the homogeneity of the psychiatric field and to "eliminate the disarray that has characterised psychiatric diagnosis" (Bayer & Spitzer, 1985, p. 187) that a unified diagnostic system was created, starting in 1952 and that took the form of the

Diagnostic and Statistical Manual of Mental Disorders (DSM). With the emergence of the DSM III in 1980, a significant step was made by grounding the diagnosis in operational criteria, apparently being, theory and value free. It was intended to be a new commonly understandable language for psychiatrists.A major issue with the DSM has been around validity. In response to this, the National Institute of Mental Health (NIMH) launched the Research Domain Criteria (RDoC) project to improve upon mainstream diagnosis by incorporating genetics, imaging, cognitive science, and other levels of information to lay the foundation for a new classification system they feel will be more biologically based.(quote). A relatively undisputed notion, underlying the DSM's focus on categorising the presence or otherwise of a disorder, is that it tends to neglect individual case by case validity and analysis, in favour of an operational structure following a rigid set of criteria, upheld by specific quantitative symptom threshold, underpinned by research, relating mainly to the biological and neurological substrates that the DSM system and doctrine state, underlie mental health disorders. (See Kreuger et al 2018). Nonetheless, given the substantial heterogeneity or range of symptoms that characterises bipolar and other similar disorders as complex and inter dependent, (quote) together with an overlap of psychotic and affective symptoms, (quote) the problem of mis diagnosis remains an ongoing and serious concern for classification authorities and practicing clinicians alike, (Zimmerman 2008). An over emphasis and reliance on biological and neurological research means neglecting valuable subjective phenomena, in relation to what is essentially a very individual and personal qualitative experience. A valid and accurate diagnosis is both essential and fundamental for the purpose of supporting appropriate and trusted therapeutic and pharmaceutical practices. (Pacchiarotti et al 2019). Despite its considerable and

historical precedence and claim to support psychiatric diagnostic integrity, the current DSM 5 system continues to fall short of capturing the many unfolding structures, characteristic of modern day mental illness, especially where cases of comorbidity are reported, which seems to be the rule rather than the exception, in mental health diagnosis in the 21st Century. (Dagleish et al 2020). It seems that the nature of mental health diagnosis requires further clarification and updating.

Notwithstanding the benefit of focusing on other dimensions of subjective interest, such as space, embodiment or inter subjectivity (Fuchs 2015), the choice of temporality as a focal point of study provides a very private keyhole through which the participants 'lived experiences can be closely observed, in line with the idea of a mood related spectrum. (quote).

Advantages and disadvantages of this study

The pursuit of subjectivity and temporality is still regarded by many as relatively unscientific in purpose, with the pursuit of neuro genetic markers seen instead as the best means of establishing connections with hereditary, functionality and the environment, as a means of early detection of various mental disorders. (Garcia Gutierrez et al 2020). The discovery of biological markers in medicine in general has led to a wide range of applications in various illnesses, for example, troponin for myocardial infarction, BRCA gene for breast cancer. However, to date, there is no such biomarker for a psychiatric disorder which can be used routinely in clinical settings. The pathophysiology of BD is more complex than other most somatic illnesses, and generally remains poorly understood. (See Sagar & Pattanayak 2017).

In the main, mainstream science, including various areas of psychology, tends to adopt a largely naturalistic, somatic and categorical approach to the diagnosis of psychopathological illnesses, preferring where possible, samples with large sizes, with a view on generalisability being a key positivist methodological factor. A one-size-fits-all approach to evaluating the rigour of research disadvantages some approaches and threatens to reduce the diversity of research in our field. Generalisability and bias are two examples of problematic constructs within paradigms that embrace subjectivity. (Varpio et al 2020). Nonetheless, the pursuit of a phenomenological and temporal sense of meaning using subjectivity as the medium of experience is considered fundamental to understanding the nuances of borderline disorders, especially if one wishes to attain a better understanding of human emotions and moods. (Fuchs 2013) and not miss the usually subtle changes in behaviour and experience that might differentiate one condition from another.

The phenomenological approach to research (see Creswell, 2014), does not aim to examine any testable hypotheses, in fact it delimits any theoretical and conceptual emphasis, not wishing to confer judgment to the natural attitude, in the tradition of (Husserl 2001) It provides a distinct methodology which precludes any direct positivist object / subject relation, yet nonetheless, follows a relatively precise empirical process. (Giorgio & Giorgio 2017). The participation within this research study was confined, following both ethical guidelines and the practicalities of qualitative research, to six participants, after a number of others potential candidates were deemed to be either unwilling or unsuitable for the purpose of this research study. The purpose of estimating any appropriate sample size is to produce studies capable of detecting

clinically relevant differences, and although this has limited generalisable validity, it did allow more focus and validity in each individual case.

The Structured Clinical Interview for DSM-5 (SCID-5) is a semistructured interview guide for making the major DSM-5 diagnoses. It is administered by a clinician or trained mental health professional who is familiar with the DSM-5 classification and diagnostic criteria. The structured psychiatric interviews are now the diagnostic gold standard in psychiatric research, which is consistent with a behaviourist methodology.mTypically, in most research and clinical care settings today, non-clinicians equipped with structured, quantifiable interviews often perform diagnostic assessments, which is both a cost efficient and measured approach to psychiatric demand. (See Nordgaard et al 2012).

Notwithstanding the status and position of the SCID - 5, in contrast here, the use of an authenticated semi structured interviews, added some advantages over the relatively easy to replicate and follow structure of the structured interview process. The Examination of Anomalous World Experience (EAWE) for e.g., (Saas et al 2017) relates to a world-oriented examination into anomalies in subjective experience, which includes temporal experiences in mood disorders and their embodied and intersubjective relationship with an environment. An approach which differs somewhat in structure and ontological emphasis to the SCID-5. This is proving to have highly adequate reliability for use in a clinical or research setting. (Conerty et al 2017). Unstructured interviews are also more flexible, in terms of questioning patients more openly, less formally in a more conversational fashion. Sufficient validity is gained contextually and through open engagement. Within this context, through both closed and open questions conversations are started, emphasis

can be drawn and new questions can then be adapted and changed depending on the respondents ’answers. A second person approach to understanding anomalies demand empathy at the very least. (Depraz 2012) The interview can deviate when appropriate, from the interview’s semi structured schedule to accommodate any new and interesting and relevant information pathways. This allows the respondent to talk freely in some depth, choosing their own words, with reference to topics of particular interest and relevance. This helps the researcher develop a real and familiar sense of a given situation. They also help increase validity, because it gives the interviewer the opportunity to probe for a deeper understanding, ask for clarification and allow the interviewee to steer the direction of the interview. This can add to the basis of what science refers to as reliability and can certainly be considered valid from an improved social understanding perspective. (Moore & Barresi 2017).

The Limits of First and Third Person Approaches to Social Understanding

Simulation theory and ‘theory’ theory, the two established theories of social understanding, have a tendency to emphasise either first- or third-person kinds of knowledge as the foundation for social understanding. The primary distinction between first- and third-person information concerning intentional activity is that the former relates to an actor's own intentional relations, whilst the latter does so with respect to another person's intentional behaviour. We have argued elsewhere (Barresi and Moore, 1996) that theories that emphasise first- or third-person knowledge only offer a shaky foundation for understanding intentional relations as the goal-directed actions of people. To understand why, it is

necessary to think about what first- and third-person information are composed of in greater detail. (See Moore & Barresi 2017)

The question of identifying with a particular disorder's signs or symptoms is driven by the patient, and it is for them to describe and corroborate what they are feeling, fryer than being categorically preconceived, blind by strict criteria and limiting thresholds. The semi structured diagnosis is not in other words, viewed using a pre given structure, but on a case by case basis, based on the conscious awareness of the patient, so it tends to be a little more detailed and time consuming. This does limit the opportunity to genesis but nevertheless remains a valid approach to understanding individual mental health experiences.

A research design is the foundational framework of a research study, (Maxwell, 2013; Miles, Huberman, & Saldana, 2014) and the interview you might say provides the bricks and mortar. The decision to use a semi structured type of design was based on EAWE guidelines as set out by (Saas et al 2017), as being flexible, yet organised around clinical first person descriptions of temporal experiences, a format allows for more freedom during the interview to explore essences of others' experiences (see Jacobs & Furgerson, 2012; Miles et al., 2014), but equally to be guided by historical clinical guidelines from previous research. (Sass et al 2017). Researchers may use many different techniques, but central to the heart of qualitative research is the desire to expose the subjective and human part of conscious experience (Jacobs & Furgerson, 2012) Through subjective, direct responses, the researcher is able to gain first-hand knowledge about what participants experience through broad and open-ended inquiry (Patton, 2002; Maxwell, 2013; Rudestam & Newton, 2015). Revisions can be made

along the way as new experiences emerge giving the researcher the ability to construct themes and patterns that can be reviewed by participants (Miles et al., 2014, p. 9). The human factor is the greatest strength and the fundamental weakness of phenomenological qualitative inquiry and analysis—a scientific two-edged sword (Patton, 2002, p. 433).

Though phenomenological qualitative studies provide compelling research data, there are limitations; the other side of the sword. For one, and perhaps the concern of many is bias (Creswell, 2014; Janesick, 2011; Patton, 2002). The researcher's role must include the integration of biases, beliefs, and values up-front in the study (Janesick, 2011). A second limitation that the process can be time consuming and labor intensive (Creswell, 2014; Janesick, 2011; Miles et al., 2014). The copious amount of data that has to be analyzed could be a disadvantage. Researcher should understand this before assuming a phenomenological qualitative study (Creswell, 2014; Patton, 2002). Further, the individual circumstances that data is collected from cannot be generalized (Maxwell, 2013; Patton, 2002). Finally, there are limitations linked to credibility and reliability; or as Rudestam and Newton (2015) advises it is the researcher's responsibility of convincing oneself and one's audience that the findings are based on critical investigation (p. 131). Patton (2002) argues there is no straightforward tests can be applied for reliability and validity. Therefore, the researcher must do their best in the interview phase to present the data and communicate what the data reveals given the purpose of the study (Patton, 2002, p. 433).

Interviewing is not a perfect method. First, enormous amounts of data is collected that require analysis; this is time consuming (Choy, 2014; Creswell, 2015). Secondly, interviewer influence can be a limitation which is why triangulation is needed ideally, to manage biases (Creswell, 2015). Lastly, participants can opt out of the study leaving one to scramble for additional participants (Jacobs & Furgerson, 2012; Patton, 2002; Rudestam & Newton, 2015). Thankfully in this study, this limitation was vetted before the interviews began in earnest.

Contribution to knowledge

Everything that occurs seems to require time for its unfolding. To grasp a better understanding of temporal relations we must turn inwards, to regard our anticipations and expectations as Augustine first informs us. What is external to to us, is always now. (Rodemeyer, 2012). For Husserl if one can uncover the essential a priori structures of subjectivity the whole of mental life and the source of all actual, possible and impossible knowledge will be revealed. Moran, (2018)

Strangely though, neither anomalous lived subjective experience or temporality are included in the main diagnostic criteria or standard symptom checklists within DSM 5, or ICD 11; (Sranghellini et al 2016, 2019), although the link between distortions in subjective time and mood disorders has been well documented and reported widely in the psychological literature, (Fuchs), which is no strange thing, given that subjective time experience is fundamental to our daily social and cognitive practices.

It was (Karl Jaspers 1913/1997) who first made the link between phenomenology and psychopathology with his seminal book: ’General Psychopathology’. (Messas et al 2018). In this vein of study, a phenomenological approach to the study of temporal anomalies within the context of psychopathology, means at one level, bridging the gap between scientific and theoretical stances and empirical and clinical practice; redirecting clinical attention away from particular disorders with a pre-conceived number of symptom and episode criteria, while on a more fundamental temporal and subjective level, we need to understand more about how a person’s abnormal experiences of time become apparent, ie, what engages their experiences to seem, (Messas et al 2018) too slow, or too fast experiences of time (Northoff et al 2018). For others time seems to stand still, while for most the flow of time becomes untypically reorganised. (Fuchs 2005).

As a fundamental feature of human experience, time is thus a suitable starting point, and primary symptom for phenomenological enquiry (quote). Though many psychiatrists believe that mental disorders have a neurological and biological basis and as such remains essentially brain disorders (Marvel & Paradisio 2004). The search for unearthing the bio-neural markers of various mental health disorders continues, however, to date they still remain elusive (Garcia Gutierrez et al 2020). Just as surely, an equally valid approach to the search for reliable diagnosis, even early detection, means not neglecting the subjective and phenomenological experience. By taking a more direct interest in the subjective element of human experience, one might be able to identify with the structures of subjectivity that emerge from life world and inter subjective interactions, which when modified, result in the psychopathological reality that emerges

A number of alternative dimensions and frameworks have been proposed to challenge or overlap the work undertaken by the Research Domain Criteria Initiative for eg. See (Ross & Margolis 2019) for a summary of its strengths and weaknesses; and phenomenological science is one such approach. (See Fernadez 2018 for contributions by Saas, Stanghellini, Parnas, Ratcliffe, Aho, and Zahavi), who all provide considerable contributions to the understanding of mood disorders. In particular it should be noted that demarcating traditional pathological symptoms from anomalous experiences of time, steers our understanding away from both the lived experience and the underlying structure of the disorder. Acknowledging this, might prove useful in understanding how mood and emotional disorders are structured along a continuum, or in other words, how different conditions are structured on inter connected levels, and with a particular emphasis on more severe psychotic experiences taking precedence, where the pathological difference is more evident, such as experiencing delusions as with schizophrenia and depression. (Stanghellini et al 2016, Sass & Parnas 2007)

The pursuit of improved classification and a better understanding of mood disorder from a psychopathological and psychological perspective has largely been neglected in light of the dominance of the current classification and categorisation system underpinning global psychiatry. (Saas & Pienkos 2013). Nonetheless, as noted above, there is growing acknowledgment in the literature that temporality is often disturbed in psychopathological states of mind, with a growing recognition that different disturbances are characteristic of different kinds of disorders. This research study looks to add to that debate. See Minkowski 1933,

Strauss 1947, Binswanger 1960, Kimhra 1992, Stanghellini et al 2009). Equally lived time is disturbed across a mix of inter related conditions, including bipolar, borderline personality, anxiety, phobias, PTSD, eating disorders and OCD. Differentiating between rows of temporal disturbances found across the psychopathological spectrum is useful for sub typing and, or the re classification of those disorders. (Fuchs 2013a, Northoff 2014, Sass 2017, Fernandez 2019a and 2019b)

Chapter 2: Literature review

Introduction

A number of key data-sources were searched for evidence of the topic and supporting structures, including APA Psych articles and info, Academia and Medline, along with some secondary sources such as google scholar and Pubmed. Initially a broad based based search was undertaken to include all known authors and relevant keywords, for eg, Husserl, Heidegger, Jaspers, Fuchs, Parnas, Zahavi, DSM and ICD classification types, mood disorders, bipolar, depression, schizophrenia, mania, including various descriptions and definitions of time, duration and temporal disorders and subjectives experiences, together other words associated with each of the key words, such phenomenology, subjectivity, embodiment, affectivity, mood, anxiety consciousness and psychosis, symptoms, signs etc

The search then switched to a search of the sub-categories of each key word, for eg, categorisation of diagnosis, bipolar and psychosis and phenomenological accounts of time. Inter subjectivity of affectivity, delusions, mineness. The search was then further elucidated by capturing core elements of the topic, for eg, mood, affectivity and emotion, existential feelings, inner consciousness comorbidity of depression and of anxiety disorders, and anomalous temporal experiences and dimensionality. A large selection of papers relating to continental phenomenology generally, types of phenomenology and specifically papers from Husserl, Heidegger and Merleau Ponty in particular, Saas, Zahavi, Fuchs, Aho, Ratcliffe, Gallagher, together with a mix of supporting papers relating to qualitative dat collection and

interviewing structures, while predominantly covering EASE and EAWE frameworks, descriptive psychological phenomenological method, introspection. A large number of abstracts and summaries were reviewed for relevance, and this was followed by a reading of the full article of a significant number of topic relevant papers. A full list of references is provided in the bibliography.

According to (Saunders & Lewis, 2011) it is impossible to read everything, nor is it necessary to do so. Yet one still needs to be sure that the critical review discusses the key research contextually, which has already been undertaken in the chosen area of study, in light of the wider context. This will inevitably mean identifying with the relevant ideas and recognised experts in relation to the topic. For some research topics there will be a pre-existing, clearly developed theoretical base. Cresswell (2007) highlights three ways in which researchers use the literature, which was adopted here. Firstly, the review was used to explicitly frame the research aims and objectives. Secondly, it was used to provide the context for the research and, finally, to help place the research findings, within the wider mainstream body of knowledge, as per mental health disorders in general. For the purposes of this review, the context of mis diagnosis was crucial. The question of mis diagnosis is clearly problematic and complex on all levels of enquiry, and thus any knowledge contribution needs to be contextualised in order to justify the research aim and objective(s). The overall aim of the review was to integrate the different ideas that were identified within the literature to create a valid and reliable framework for supporting the research enquiry, in line with the chosen methodology.

Opposition to phenomenology in this case and the study of consciousness and subjectivity is widespread in mainstream research circles and is often seen in opposition to the mainstream paradigm of measuring and quantifying mental health variances and conditions, according to principles underlying somatic medicine. (Saas & Parnas 2007). Nonetheless it is necessary to include and discuss research that is counter to the preferred view, as this often provides dialectical insight. (Cresswell 2014). This is important in order to provide readers with as broad as possible a picture of the extant literature. Within this context, the aim was to juxtapose different authors 'ideas and form a clear picture of what was found. (Saunders et al., 2009).

In empirical research an important aspect of study is to be open and critical, by considering how convincingly or not, various authors 'claims are justified by the evidence (Wallace & Wray, 2011). For eg, the idea was not to decry the current classification and operationalised underpinning the psychiatric assessment and categorisation process but rather to direct attention to the constraints of an historical system that still aims to maintain a standardised approach to diagnosis, interviewing and ultimately reliability, however well intended, (Parnas & Sass 2013). A system that neglects fundamental features of mental health and human experience, such as temporality and subjectivity requires scrutiny. There is clearly no single or preferred way to address any problem. However, the review still needed to evaluate what work had already been undertaken broadly, in the chosen areas of study, and which seen together, have led to the current debate surrounding, in this case, anomalies underlying experiences of time and how a range of temporal phenomena, experienced in various untypical ways, relates to the fundamental notion of mood disorder

Section 1 : Classification

Section 1(i) History and culture

The classification of mental illnesses has ancient roots, and more specifically it has Greek roots. See (Kleisiaris et al 2014) for a full review of ancient practices. Although what we now refer to as psychosocial or psychosomatic causes, such as those caused by traumatic stress, were also thought to have been contributory factors, mental illness was frequently believed to have supernatural origins, like most natural phenomena in early human history, such as demonic possession caused by witchcraft. Galen's typology, which was based on Hippocrates' theory, which dates to the 5th or 4th century B.C., and which related to the idea that health required a balance among the body's four basic temperaments: choleric, sanguine, melancholic, and phlegmatic, in the 2nd century A.D., was perhaps the earliest theory of mental illness. Each temperament had an associated pathology, which was the result of excess in one of those humors: four humors: yellow bile, blood, black bile, and phlegm. Today, much has changed, and many scientific theories now base themselves on having biological and neurological cause, which is governed by brain structures and various biological processes and somatic markers, rather than the four humors.

The categorisation of bipolar disorder as an illness is reputedly down to Falret, who in 1851 and 1854 on the basis of longitudinal observations developed the entity of “folie circu- laire” (circular madness), defined by manic and melancholic episodes, which was thought to be separated by symptom free intervals. In 1854 Baillarger used the term folie a` double forme to describe cyclic (manic–melancholic) episodes (Pichot 1995;

Ritti 1879). Kraepelin called such cyclic episodes “double attacks.” From 1899 to 1913, Emil Kraepelin (1856-1926) works on, looking to create the nosographical group of the "manic-depressive insanity". In the 50-60s, Leonhard splits off this homogeneous group and describes unipolar psychosis, bipolar psychosis and cycloïd psychosis (anxiety-elation psychosis, motility psychosis and confusion psychosis). the Wernicke-Kleist-Leonhard pathway, as it is known, has optimised the descriptions of 35 major phenotypes using common medical heuristics on lifelong diachronic observations.The phenotypes reportedly had good reliability and predictive and face validity. (See Foucher et al 2020). More recent times have seemed to have announced a come-back to Kraepelin's conception of "mood disorders". (GeRaud 1997).

At the turn of the 20th century, two diametrically opposed theories dominated the debate concerning the classification of the endogenous psychoses. On the one hand, Carl Wernicke, Karl Kleist and later Karl Leonhard advocated a model which related to the endogenous psychoses encompassing a wide range of diseases. In contrast, Ernst Albert Zeller, Heinrich Neumann and Wilhelm Griesinger and Leonhard championed the concept of a unitary psychosis. Unitary psychosis' is the collective name for a set of disparate doctrines whose common denominator is that there is essentially only one form of psychosis and that its diverse clinical presentations can be explained in terms of endogenous and exogenous factors.

As a compromise between these two conflicting views, Kraepelin proposed that the endogenous psychoses could be divided into two groups. In the sixth edition (1899), he first made the distinction between manic-depressive psychosis and dementia praecox, now called

schizophrenia. He believed that manic-depressive disorders and melancholia (depression) were exogenous and thus were treatable, while dementia praecox fell among the endogenous, incurable illnesses.The Kraepelinian dichotomy has survived to the present day and forms the basis of most standard systems of classification.

Kraeplin later worked with Carl Wernicke (1848–1905) who in this area was more well known for developing the dis connectivity theory of schizophrenia. Although he was best known for his theories regarding the neural circuitry involved in higher cognitive functions and the neuropathology of aphasia, he also studied the neuroanatomical and functional aspects of schizophrenia. In his textbook (Outlines of Psychiatry 1900) which was based on detailed reviews of his clinical cases, he outlined his hypothesis that there is a deficiency in association fiber connectivity in schizophrenia that contributes to an over-activation of cortical sensory regions that can then lead to the development of psychosis. Until the middle of the nineteenth century, mental disorders were classified on the basis of their clinical symptoms only.

In an innovative departure, Pinel attempted a classification, which took into account, not only symptomatology, but also the observed course of the illness (de Boor 1954). The work of Kahlbaum has obvious parallels with this approach. He paved the way for Kraepelin, Jaspers and others by inspiring the development of a 20(th) century clinical psychiatry. With his work he contributed to new ideas in general psychopathology and in psychiatric nosology. He described "clinical state-course-entities" and developed the concept of "exogenous reaction types", which would later be known as the "Bonhoeffer-paradigm". Kahlbaum was also the first to differentiate between centripetal, intracentral and centrifugal psychic

functions, which was later transformed into the "psychic reflex circuit" by Wernicke. The concept of organic versus non-organic psychoses proved to be a heuristically fruitful classification system even for modern psychiatry. Kahlbaum was the first German psychiatrist to describe several disorders and syndromes and to coin new psychiatric terminology for them, including paraphrenia, hebephrenia, catatonia and cyclothymia. These terms and their originally associated meaning are still in use today. Kahlbaum's ambitious scientific aim was to develop specific therapeutic strategies which were based on a methodologically and etiologically sound classification system, which still remains the basis of mental health science today. (Clark et al 2017)

Section 1(b): modern classification

Throughout the history of psychiatric classification, two distinct approaches have been taken to delineate the nature of specific psychopathologies. In this respect, experts gather under the auspices of official bodies, and delineate classification systems through group discussions and various associated political processes. This approach characterises official nosologies, such as the current DSM 5 and the ICD 11. It also often characterises official efforts to influence the constructs and conceptualisations to support the needs and perspectives of funding bodies. For example, the US National Institute of Mental Health’s Research Domain Criteria (RDoC) is one such example, whose efforts involve the delineation of constructs that are intended to be shaped and organised by panels of experts. (Carcone & Ruocco, 2017)

In contrast the second approach is an empirical one. In this approach, data are gathered through psychopathological research and other data

collection processes. These data are then analysed to support investigations into specific research topics. This approach is sometimes characterised as being more “bottom up” than compared to the more “top down” approach of official nosologies. This is because the approach generally starts with basic empirical observations and description, and looks to assemble them into classification understandings, rather than working from a pre set of assumed assumptions and conceptualisations.

(Muslim 2010) notes that two distinct approaches have been adopted for addressing ethical issues: the first is a ‘top-down ’approach which focuses on developing policy, procedures, regulations and guidelines to aid decision makers. The second is a ‘bottom-up ’approach, which begins by gathering data from those who are most affected by the issues and attempts to inductively develop by consensus, certain applicable recommendations and policies.

It was Kraepelin, among others who mostly influenced the development and emergence of our modern psychiatric ways, which were written into the foundations of the first DSM in 1952. By DSM 3 in 1980, it was thought that unreliability had been exorcised. (Blashfield et al 2014). However despite the many advances in categorising illness and disorder, improving communication between clinicians, as well as providing an easy to measure metric for quantifying symptom typology.

The current classification system is described by Dalgleish et al, (2020), (Hyman 2010) as chaotic, likening it to an epistemic prison that is limited and constrained by both health insurance and pharmaceutical practices, despite the many biomedical advances that have emerged in neuroscience and genetic research (Garcia & Gutierrez 2020). It is this

approach that lies at the heart of government and legal policy making as it relates to funded research, whilst simultaneously constraining and misleading the general media view, pertaining to the benefits that improved healthcare brings to the population at large. Such research is sanctioned and supported by government and legal policies and dominates social and public discourse about mental health and illness, as reflected generally in art, literature and the commercial visual media (Ussher, 2010).

Despite the fact that attempts to categorise mental health issues have been made for thousands of years, codified diagnostic models did not begin to take shape until the 19th century, when the biological and Linnaen botanical categorization systems were developed. The release of the first edition of the DSM in 1952 was made possible in large part by Kraepelin's Compendium der Psychiatrie, which was published in 1883 (Compton & Guze, 1995). (DSM-I, American Psychiatric Association, 1952). When the DSM-III was published in 1980, it provided a comprehensive multiaxial diagnostic framework with precisely operationalized criteria for a wide range of diseases and no allegiance to any particular theoretical perspective other than a broad biological paradigm. Diagnostic psychiatry was heralded as experiencing a "paradigm shift" with the release of the DSM-III, which saved the field from "unreliability and the oblivion of irrelevancy" (Blashfield, Keeley, Flanagan, & Miles, 2014). (Frances, 2009, p. 2). The DSM-5, the most recent iteration of the DSM, was released in 2013, following a 14-year gestation period, and it contains 947 pages encompassing about 541 diagnostic categories (up from 106 in the DSM-I; American Psychiatric Association, 2013).

The DSM and ICD have evolved into self-perpetuating systems that now govern and define all aspects of how we conceptualize mental health. They provide an organizing framework for virtually all core texts in psychiatry, clinical psychology, and abnormal psychology (Cosgrove, Krimsky, Vijayaraghavan, & Schneider, 2006; Marecek & Hare-Mustin, 2009), they guide mental health training across the helping professions, and they define how we assess, manage and treat mental health problems worldwide.

There are many factors underscoring this rise to dominance of the DSM. Some are certainly sociopolitical (Kawa & Giordano, 2012; Khoury, Langer, & Pagnini, 2014) with diagnoses offering a biomedical legitimacy to discourse about mental ill health that has a broad academic, professional, and social appeal. Others are more pragmatic as, without doubt, the diagnostic paradigm offers some clear benefits to clinical and research practice: It provides a system for describing clusters of symptoms that facilitates communication between users of services, clinicians and researchers; it sets out a common metric for research programs; and it provides an organising principle for the development and evaluation of diagnosis-led assessment and treatment approaches (Hayes & Hofmann, 2018). Finally, for some, the biomedical model at the heart of the diagnostic approach also brings a legitimacy to the suffering that is experienced, reducing stigma and deflecting pejorative judgments that mental ill health reflects some form of personal weakness on the part of the diagnosed.

Section (1c) Clinical constraints

Despite the obvious advantages of the diagnostic paradigm, as a framework and guiding structure for controlling and explaining mental health care practices, there is a gathering apprehension that the taxonomic approach instantiated in the DSM and ICD runs counter to the growing range of available clinical and research evidence, which may be hampering our understanding of mental ill health and consequently how we manage and treat mental illness (Insel, 2014; Kotov et al., 2017). (Craig & Boardman, 1997), in their review of the literature, looked to capture the problem of identifying commorbidity, associated with various mixed diagnoses of mood disorder, as they cross over with general anxiety disorder, substance abuse, stress related disorders, obsessive compulsive disorders (OCD) and Post Traumatic Stress Disorder (PTSD) for eg. (Angst, 2013) notes that as clinicians and researchers, we rely to a great extent on the diagnostic manuals. DSM-5 added increased activity and energy levels on top of DSM-IV's elated and irritable mood as criterion A, as a core feature of mania, to differentiate the condition. Machado-Vieira et al, (2017) findings confirmed that including increased activity or energy as part of DSM-5 criterion A decreases the prevalence of manic and hypomanic episodes but does not affect longitudinal clinical outcomes. This preference for a hierarchy of symptoms has no basis in empirical data. The consequences of which mean changes in the diagnoses of many subjects with a DSM-IV bipolar disorder into MDD. Angst (2017) reports the data supported the inclusion of heightened activity (energy) as a diagnostic criterion but not its hierarchical position in the DSM-5 concept of bipolar disorder

Section 1(d): Classification and bipolar

What is bipolar disorder? (BD)

Bipolar disorder is a chronic and complex mood disorder that is characterised by an admixture of manic (bipolar mania), hypomanic and depressive (bipolar depression) episodes, with significant subsyndromal symptoms that commonly present between major mood episodes. (Mcintyre et al 2020, Angst 2007). Ghaemi et al, (2022) remind us that all revisions of DSM since 1980 have suffered from an overly pragmatic approach to diagnostic definitions. Most definitions have been constructed for many dubious purposes, with research evidence not necessarily being a primary one.

Ranked among the leading causes of worldwide disability, bipolar I disorder has been consistently associated with significant medical and psychiatric comorbidity, premature mortality, high levels of functional disability and reduced quality of life, as well as high rates of suicide. (Angst 1998, 2007, Ghaemi et al 2008). The essential feature of bipolar I disorder requires the occurrence of at least one fully syndromal lifetime manic episode, although depressive episodes are common. Bipolar II disorder requires the occurrence of at least one hypomanic episode and one major depressive episode; it is no longer considered a milder form of bipolar disorder as it is associated with considerable time spent depressed and with functional impairment that accompanies mood instability. (Angst 2001). Bipolar disorder with mixed features is a complex presentation in which a mood episode from either the manic or depressive pole is complicated by the presence of subsyndromal but clinically significant symptoms from the opposite pole. (Swann 2017). Patients with bipolar depression have greater morbidity and mortality than patients with bipolar mania, with depressed patients having a higher risk of suicide, inter episode panic attack and psychosis. By

definition, subsyndromal describes a person as exhibiting symptoms that are similar to but not severe enough for diagnosis as a clinically recognised syndrome. (Angst et al 2011). When applied to depression, subsyndromal symptomatic depression (SSD) indicates that a person's depression symptoms don't quite meet the criteria for a diagnosis of a major depressive disorder. SSD can include people who experience brief, recurring episodes of depressive symptoms.

Irrespective of its quantitative features, and given the nature of mixed features and comorbidity, particularly in adolescents, (Mcintyre & Calabrese 2019) remind us that clinicians should be alert at all times for symptoms of bipolar disorder in undiagnosed patients, know what symptoms most likely suggest bipolar versus unipolar depression, have expertise in providing ongoing treatment to diagnosed patients, have a clear picture of family history and any substance abuse, and be knowledgeable about managing common medication-related side effects especially in view of the chances of comorbidities. Prompt and accurate diagnosis is both essential and critical for a reliable diagnosis.

For the first time, bipolar disorder has its own chapter within (DSM 5, published 2013), sitting in between depressive disorders and schizophrenia spectrum disorders. The diagnostic criteria now includes both changes in mood and in activity or energy. However one needs to be mindful of the changes in energy criteria that in DSM 5 now place it hierarchically above mere elevation of mood (Angst 2017). also and previously, the diagnosis of a mixed mood episode required a patient to simultaneously meet the full criteria for both mania and major depression. However, in DSM 5 a new specifier with mixed features has replaced that necessity, and now acknowledges the coexistence of up to

three manic (sub threshold) symptoms, appearing and observed simultaneously within a major depressive episode. (Phillips & Kupfer 2013). In view of this the bare essentials of the categorical diagnosis model is considered far too rigid to encompass the wide range of symptomatology encountered in modern clinical practice. Since the publication of DSM-IV in 1994, neurobiologists and anthropologists have criticized the rigidity of its diagnostic criteria that appear to exclude whole classes of alternate illness presentations, as well as the lack of attention in contemporary psychiatric nosology to the role of contextual factors in the emergence and characteristics of psychopathology. (See Fernandez & Aggarwal 2013)

The two main genetic mood disorders are: unipolar depression and bipolar disorder. The main reason for mis diagnosis is reported to be unipolar depression. (Singh & Rajput, McIntyre & Calabrese 2019). Differentiating bipolar disorder from unipolar depression is one of the most difficult clinical questions posed in pediatric psychiatric practices, as misdiagnosis can lead to severe repercussions for the affected child. (Kelberman et al 2021) reviewed a large range of neuro imaging studies and could come to now conclusive difference. Meter et al 2021 remind us that people who have major depressive disorder (MDD) or bipolar disorder (BD) will have their first episode of depression in adolescence. They compared phenomenological differences among youth with MDD or BD hospitalized for an acute episode of depression and found that the presence of subsyndromal manic symptoms during an episode of MDD currently offered the clearest way by which to differentiate between bipolar depression and unipolar depression.

To confound matters, unipolar depression and bipolar depression share the same symptoms with only three main differences: 1) Bipolar depression is more episodic than unipolar, 2) Bipolar depression is always on the edge of mania, and 3) Due to the mania risk, bipolar depression treatment is different than unipolar depression treatment. “The distinction between schizophrenia and bipolar illness, should be ideally linked to the considerations of the prototypical ‘whatness ’ (residing in the alterations of the structure of subjectivity (Parnas 2011, 2012)) rather than rely on the quantitative check list scores”. For example, clients with trauma and emotional dysregulation will have high emotional energy states for short periods of time (even fluctuating within the course of hours or a day).

This is important to distinguish from a true Bipolar illness, where clients have manic and irritable mood states that last days to weeks to even months in the case of major depression. Clients with emotional dysregulation can often identify a triggering event such as the breakup of a relationship, criticism or failure at work or school, or family stress. Bipolar Disorder, on the other hand, is a mood disorder with less day-to-day volatility around mood states (though it is often triggered by stress).

In DSM 5 bipolar and related disorders are now separated from the depressive disorders by schizophrenia and the psychotic spectrum disorders. This recognises the bridge between symptomatology, family history and genetics. BD 1 criteria represents a modern understanding of the classic manic depressive disorder or affective psychosis described by psychiatrists in the 19th century; differing only to the extent that neither psychosis nor the life long experience of a major depressive episode is a requirement. Bipolar 2 on the other hand does require the

lifetime experience of at least 1 episode of major depression and at least one hypomanic episode. Both conditions are considered to be equally debilitating as both are affected by depression to a large extent. Moreover, the mood disorder is typically complied by dysfunction and disruption to work routines and social interactions.

The classification of mood disorders under DSM IV had 2 major shortcomings: an under diagnosis of bipolar disorders, and a large number of patients had to be classified as ‘not otherwise specified’. Several other sub-groups are now operationally defined in DSM 5. (Angst 2013). The diagnosis for bipolar as per DSM 5, now requires not only the presence of an irritable mood but also increased levels of activity and energy.

Section 1(e): Diagnostic classification

Broadly speaking, the DSM consists of three major components: (1) the diagnostic classification, (2) the diagnostic criteria sets, and (3) the descriptive text. The diagnostic classification is the official list of mental disorders recognized in DSM. Each diagnosis includes a diagnostic code, which is typically used by individual providers, institutions, and agencies for data collection and billing purposes. These diagnostic codes are derived from the coding system used by all U.S. health-care professionals, known as the International Classification of Diseases, eleventh Revision, Clinical Modification (ICD-11-CM).

For each disorder included in DSM, a set of diagnostic criteria indicates symptoms that must be present (and for how long) as well as a list of other symptoms, disorders, and conditions that must first be ruled out to

qualify for a particular diagnosis. While these criteria help increase diagnostic reliability (i.e., the likelihood that two doctors would come up with the same diagnosis when using DSM to assess a patient), it is important to remember that these criteria are meant to be used in conjunction with what is found empirically.

To support the DSM system and expand a more informed and broader understanding of mental disorder, the National Institute of Mental Health's Research Domain Criteria offers a framework that places an emphasis on the integration of fundamental behavioural and neurological research. In doing so, it identifies four major problems that make it difficult to understand and categorise mental disorders: (1) comorbidity, which refers to the fact that people with mental illness frequently meet the diagnostic criteria for multiple conditions; (2) thresholds; (3) whether the relevant phenomena are discrete categories or dimensions; and (4) aetiology, which includes direction as to the causality of mental disorders. (Clark et al, 2017)

Descriptive Text

The third area of DSM is the descriptive text that accompanies each disorder. The text of DSM–5-TR provides information about each disorder, advocating the following aids:

- Recording Procedures
- Specifiers
- Diagnostic Features
- Associated Features
- Prevalence

- Development and Course
- Risk and Prognostic Factors
- Culture-Related Diagnostic Issues
- Sex and Gender-Related Diagnostic Issues
- Association With Suicidal Thoughts or Behavior
- Functional Consequences
- Differential Diagnosis
- Comorbidity

https://psychiatry.org/psychiatrists/practice/dsm/about-dsm

The restrictions on description are discussed elsewhere and iti s limitations within the categorical system. However it is worth reminding readers that the current DSM 5 fails to santion the need for reliable first person description, by largely omitting any reference to either together temporality or the subjective nature of mental health, which has been widely reported elsewhere. (Pienkos 2013, Nordgaard et al 2012, Sass & Parnas 2017, Fuchs 2010). This remains a stark omission to the fundamental diagnostic process. Nonetheless, it does not constrain the omission of new classifications, or even adaptations to existing ones. The aim of which appears to be to offset some of the questions that arise due to the problem of complex diagnosis, and add additional specification, which lies outside the general classification protocols. With bipolar now thought to exist as part of a continuum. (Fanjia Guo et al 2020). See (Lojko et al 2014) for a review of all the relevant DSM mood disorders and codes

Section 1(f): New classifications

The current DSM 5, (published in 2013), includes 3 new mood disorders: (1) Disruptive mood dysregulation disorder, (2) persistent depressive disorder, and (3) premenstrual dysphoric disorder. However there remains a lack of empirical data to support validity. (Baweja et al 2016). Despite the developments in the evolution of our understanding of mood disorders, (Rakofsky & Rapaport 2018), our understanding of exactly how multiple factors influence the development and course of even the most common mental disorders remains incomplete. As a result, our major classification systems, ie DSM 5 and ICD 11, are based almost exclusively on observable externally observed behaviours (signs) and self-reported internal observation of emotions, feelings, moods and thoughts (symptoms) rather than on any underlying internal, external relationship and, or causal mechanisms, rather than on clinical examinations of subjective conscious experience. (Sass & Parnas 2017)

Notably, the continued absence of any notable direction towards and mainly exclusion of subjectivity and temporality, within the current classification system, seem to suggest that we have reached the limits of understanding the complex nature of mental disorder, through outwardly observable signs and internally experienced symptoms alone. (Sass & Parnas 2007)

In favouring a system structured by the rigid categorisation of disorders, based upon a quantifiable number of symptoms being present or not, at a given time, in relation to their duration and frequency, the given number of reported episodes, the present diagnostic system largely ignores any observed empirical evidence, qualitative or otherwise, which sits outside it. This serves to undermine the validity and integrity of not only the process of diagnosis but the system that is intended to serve it

(quote). If for no other reason than this approach fails to capture the continuous nature and complexity that is inherent in mental health disorders, a fact that is highlighted in cases of comorbidity. (Kreuger et al 2018), which (Dalgleish et al) consider is the rule now rather than the exception

To address the dynamical and changing nature mental health disorders, the DSM system has been forced to put forward numerous modifications, transformations and changes, including the introduction of countless new sub types symptom revisions to off set and fill diagnostic limitations and gaps, leading to the classification and categorisation of bipolar and other mood disorders for eg, becoming ever more shrouded in confusion, doubt and uncertainly, with the obvious effect on diagnostic validity, whilst in pursuit of inter rater reliability. (Angst 2007). It has been reported that DSM 5 was intended as another radical shift, to acknowledge that mental disorders are continuous in nature and in the main exist on spectrums. (Phelps 2016)

Although this fact was acknowledged it was largely omitted from the final draft of the manual. Prior to the publication of DSM 5 a review of the nature of the existing categorisation protocols took place. Members of the DSM-5 Task Force and Work Groups reviewed the results of the abundant neuroscience research published over the past two decades and realised that “the boundaries between many disorder ‘categories ’ are more fluid over the life course than DSM-IV had previously recognised”. However, they concluded that the switch to and the implementation of a dimensional approach to diagnosis, would have dramatically changed the focus of the DSM as a whole. The Task Force “recognised that it is too premature scientifically to propose alternative

definitions for most disorders”. DSM-5 thus continues to use the categorical approach to clinical diagnosis, or in other words the system, most familiar to clinicians worldwide. In addition, The Psychotic Disorders Workgroup decided that DSM-IV criteria for the psychotic disorders “do not accurately capture the considerable variability of symptom profile, response to treatment, and most importantly, social function and outcome”; (Biedermann & Fleischhacker, 2016); however, despite this admission, and considerable pressure to move to a dimensional approach to the diagnosis of psychotic disorders, the DSM-5 does not represent such a paradigm shift.

Section 2: reliability and validity

Section 2(a): The soft underbelly

Psychiatric diagnosis was historically referred to as the "soft underbelly" of psychiatry prior to DSM III in 1980 (Spitzer et al 1979) because of low inter-rater reliability. Diagnoses in the past were interpretative and rather arbitrary. Psychiatry has fewer laboratory markers or imaging data to support a preliminary diagnosis than the rest of medicine. Later versions of the DSM, however, have aimed for more precise, trustworthy diagnoses. Despite this, American psychiatry and their DSM charter continue to have many difficulties with accounting for the particularities of inter-rater reliability of mental diagnosis and thus with the reliability and validity of diagnosis more generally.

Section 2(b): Standardising the system

There were two significant breakthroughs in the United States that ran concurrently with the initial worldwide initiatives at operational standardisation. First, a seminal work by E. Robins and Guze from 1970 proposed a set of guidelines for determining the validity of clinical syndromes (such as distinctiveness from other conditions, a shared clinical course, and genetic aggregation), and it used schizophrenia as an example. The 12 diagnostic categories were then subjected to these concepts by Woodruff, Goodwin, and Guze in 1974. Second, academic departments of psychiatry created specialised diagnostic criterion sets based on this theoretical viewpoint to standardise case identification for research purposes, the outcomes of which could be utilised to enhance and establish the validity of the criteria. The first such set was the Research Diagnostic Criteria (RDC) produced at Columbia University, which came after the "Feighner criteria" developed at Washington University (Feighner et al., 1972). (Spitzer, Endicott, & Robins, 1978). These efforts resulted in the DSM-III (APA, 1980), which was the first mental health categorization system to significantly advance the descriptive approach to psychiatric diagnosis.

Each mental disorder in the DSM-III was operationally reduced to and defined by a specific list of observable more or less biological signs (such as weight loss of at least 25% of original body weight or defaults on debts or other financial obligations) and patient-reported symptoms (such as hallucinations, loss of appetite); as well as by several types of specific thresholds for determining a disorder's presence, including (a) number of signs and symptoms. The categorisation of mental health disorders into neat little bundles was couple with a quantification of signs and symptoms that made it easily recognisable. However as has been

noted, mood and other mental health disorders are far from simple (See Fernandez et al 2018, for a review of brain complexity.)

Despite the obvious complexities that were not being accounted for, the strength of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, DSM-III-R and DSM-IV), nonetheless, was to base psychiatric diagnoses on defined operational criteria, which resulted in high inter-rater reliability. However, a weakness, shown in relation to DSM-IV, was that it was only able to formally diagnose less than 50% of the patients actually treated (Angst et al. 2010). This clinically unacceptable situation derived partly from the lack of operationalised sub threshold observation and thus diagnoses. In recognition of the fact that for a large group of patients receiving treatment clinicians have often not had an alternative to the residual, catch-all diagnosis not otherwise specified (NOS). Consequently, DSM-5 (2013) now includes a new list of defined sub threshold syndromes, which has stimulated new research, allowing for a more multi dimensional analyses of mental health disorders. New sub categories have been added in an attempt to circumvent the narrow straits of categorisation. Consequently, recurrent brief depression and even short-duration depressive episodes (4 to 13 days), as well as 2-week episodes with insufficient symptoms, now have their place. (see Angst 2013). Subthreshold pediatric BP disorder is a well known a clearly identifiable morbid condition associated with significant functional impairment including psychiatric comorbidities and high rates of suicidality. (Vaudreuille et al 2018). As pediatric bipolar disorder tends to evolve over time, some adolescents may present to clinical attention with insufficient symptoms to fulfill full diagnostic criteria for a diagnosis of BP disorder. While much is known about full threshold pediatric BP

disorder, little is known about subthreshold forms of pediatric BP disorder.

Section 2(c): what is Inter Rater Reliability (IRR)?

IRR enables researchers to quantify the degree of agreement or consistency in ratings among two or more raters in clinical ratings (e.g., Ventura et al. 1998). The aim of inter-rater reliability, despite not having any recognised published guidelines pertaining to best practice, is to attain a reliable diagnostic consensus among clinicians and where possible achieve early detection. (Gruber & Weinstock 2018). In other words, it refers to the consistency with which a particular assessment method comes to the same conclusions when applied by different raters to the same information sources and body of authority. Reliability is particularly important when there is no ‘gold standard ’as is the case in making psychiatric diagnoses. Where the result of rater judgement is a need for classification, two classes of measure of agreement have been used, ie, those based only on the percentage of subjects receiving the same classification from the raters, known as (‘percentage agreement’) and those incorporating also a ‘correction for chance agreement’. (See Einfield et al 2007). Contrary to DSM III claims, reliability does not naturally necessitate or lead to validity; especially when reliability is the primary goal.

Validity, on the other hand, is the extent to which a mechanism used to measure something, actually measures what it is intending to? In the case of bipolar and, or other mood disorder variant, one has to consider the validity of the diagnostic tools being used; and ask, do different assessment systems arrive at the same diagnosis for the same patient?

What makes a reporting or observational mechanism valid? (Luby & Belden 2006) state that, essential to understanding early onset mood disorders is knowledge about the developmental trajectory of the related, basic emotional processes. Substantial gaps, relating to the emotional development of joy and sadness, as well as the "complex and self-conscious" emotions of guilt and shame were identified. These selected emotions were deemed key to understanding the developmental psychopathology of mood disorders. They also reviewed developmental literature on "emotion dynamics" and "emotional competence," and proposed an integration of these two emotion-development frameworks to create a new and testable developmental psychopathology model for understanding early-onset mood disorders. (Beck 1994) notes that reliability and validity are two areas where the criteria of logical empiricism appear to be imposed upon phenomenology as a research method. The search for rigour has led to the idea it seems that many qualitative researchers have still not contextualized the role of validity in qualitative analysis. (Giorgio 2002, Giorgio & Giorgio 2017) have disputed this. Controlled phenomenological qualitative research is now much closer to experimental situations and so the validity issue is not as pressing as is often supposed.

This prompts the question of the nature and reliability of description in phenomenological research. (Sass & Parnas 2015) The conceptualisation of psychopathological phenomena into discrete entities is typically inadequate for observing dynamical interplays between interdependent, embodied and inter subjective entities. (Fuchs 2005). Nonetheless, reliable indicators of validity, such as that that emanate from rigorous descriptive analysis (see Giorgio & Giorgio 2017) which provides an added clinical utility and dimensional that enable one

to obtain an accurate view of the nosological state of mental disorders when evaluating different aspects of their nosological construction.

IRR enables researchers to quantify the degree of agreement in ratings among two or more raters in clinical ratings (e.g., Ventura et al. 1998), aiding in the resolution of issues of differential diagnoses and either over diagnosis or under diagnosis of BD (e.g., Hirschfeld et al. 2003; Zimmerman et al. 2008). Notwithstanding this, the fact that there are no published guidelines on IRR and increasing amounts of evidence pointing to a substantial proportion of individuals previously diagnosed with BD failing to meet formal diagnostic criteria upon structured interview, leading to false-positive cases in addition to the false-negative cases encountered in routine care (Zimmerman et al. 2008), puts the whole notion of rater reliability into question. (Gruber & Weinstock 2018). A statistic vaunted by some and ignored by others is that it has been reported that 40% of diagnoses tested in field trials for DSM 5 received insufficient inter rater reliability. (See Ruggero et al 2019). Validity and reliability are nonetheless central to research integrity, and nowhere is this more evident than the suitability and reliability of the data gathering process, as part of a robust methodology. The integrity of the description of the data is an essential ingredient, if one is to make defendable knowledge claims and to gain the acceptance of the scientific world.

Section 2(d): reliability of data and the interview process

While diagnostic criteria helps to establish reliable diagnoses, the methods of gathering and interpreting patient data have a tremendous effect on how likely it is that 2 examiners will come to the same diagnostic conclusion for a given patient. In order to enhance the

reliability of psychiatric diagnosis, the American Psychiatric Association released the Structured Clinical Interview for DSM-III, which has accompanied the evolution of the DSM through several revisions and expansions. Since then, the use of the interview has spread widely and it has become the main instrument to select and describe research samples all over the world. The latest version of the instrument is called ‘SCID-5 ’and it has five different versions, the main of which is the SCID-5 – Clinician Version (SCID-5-CV), a shorter and reformatted version of the SCID-5-Research Version that covers the most common diagnoses seen in clinical settings. (Gruber & Weinstock 2018.)

(Osorio et al 2019) assessed the clinical validity and different reliability indicators (inter- rater test–retest, joint interview, face-to-face vs telephone application) of the SCID-5-CV in a sample of 180 patients. The SCID-5-CV presented excellent reliability and high specificity as assessed with different methods. The clinical validity of the instrument was also confirmed, which supports its use in daily clinical practice. Osorio et al conclude in their study of validity and reliability that the excellent reliability and high specificity of the clinical version of the SCID-5 have been confirmed through different methodologies, supporting the status of the instrument as the main choice for diagnostic assessment in psychiatry, especially in the context of clinical research. The measurement used most often to determine reliability is called the kappa statistic, described by Kirk and Kutchins (1992), DSM-III’s foremost critics, as a mathematical formula often utilized in social sciences research – e.g., anthropology, sociology – to minimize reliability occasioned by sheer chance. However despite the fundings of this study, in the main, phenomenological analyses of subjective

experiences, temporal or otherwise have been discluded from validity checks.

Nonetheless, two findings of this study deserve to be highlighted: (i) the adequacy of the instrument for telephone use, which may have an important positive impact in the selection of participants for clinical and epidemiological studies in distant or remote areas; and (ii) the need for caution in the use of the instrument by professionals with little experience in clinical psychiatry, which seems to be fundamental in the rating of psychopathology.

Spitzer famously asked: are skilled and experienced clinicians actually needed anymore? Why he asks do we use expensive and unreliable (differing by consensus) psychiatrists when you can employ less expensively trained clinicians, who stick to the script? (Nordgaard et al 2012) remind us that despite highly structured interviews have become the golden standard of interviewing in psychiatry, primarily in research but also, increasingly, related to ordinary clinical work, the literature relating to psychiatric interviewing in the main deals with comparisons of the relative efficacy, ie the degrees of sensitivity and specificity, and reliability of particular interview approaches. All too often, these discussions fail to address the more overarching theoretical concern, in terms of what is the epistemologically adequate manner of obtaining psycho-diagnostic information, what is the ontological position and nature of the disorders? There is limited mention in the literature any single contribution that systematically addresses ontological and epistemological foundations. By ‘‘ontological ’’I refer here to the nature of the psychiatric symptom and sign, the establishment of which is often the primary objective of the psychiatric interview

Section 2(e): reliability and mood disorder diagnosis

A major goal for the revision of the International Classification of Diseases and Related Health Problems, starting with the Tenth Edition (ICD-10) was to increase the clinical utility of the diagnostic system. Schizoaffective disorder, for eg, has a history of poor diagnostic reliability due to the similarities and overlap in symptoms that it shares with other disorders, especially primary psychotic and mood disorders. Results suggest the discrepancy in diagnosing schizoaffective disorder is related primarily to the presence of mood symptoms and discrepancies about whether those symptoms are more consistent with schizoaffective disorder or a mood disorder diagnosis. Continuing to identify ways to more accurately capture the closely inter connected and inter woven nature of mental illness, ie, complexity of mood disorders, will be important in the future as well as systematic efforts to educate clinicians about differential diagnosis; see (Peterson et al 2019). (Moriarity et al 2021) conclude that mood disorders and substance abuse, a common occurrence today, are frequently found to be comorbid (Kessler et al., 1997). This co-occurrence is associated with worse treatment outcomes, more severe course of illness, and heightened risk of suicide (Tolliver & Anton, 2015). Compared to individuals with no mood disorders, those with unipolar depression were twice as likely, and people with a bipolar spectrum disorder (BSD) nearly seven times as likely, to have a history of substance use (Kessler et al., 1997). Importantly, research suggests that the relationship between problematic substance use and mood symptoms is bidirectional in nature (Pacek et al., 2013; Salloum & Thase, 2000). This is consistent with theories that suggest that one reason for this comorbidity is that

features of one disorder increase risk for the other (Strakowski & DelBello, 2000, Dalgleish et al 2020). Consistent with research suggesting that not all symptoms of a given diagnosis have the same risk factors (Fried et al., 2014), it is possible that not all mood symptoms confer equal risk for all types of problems secondary to substance use, and vice-versa.

Section 3: Misdiagnosis

Section 3(a): what is meant by misdiagnosis?

1. Misdiagnosis – to form an incorrect opinion about the cause of an illness or disease which in turn results in an inappropriate treatment pathway
2. underdiagnosis is a condition that is often not diagnosed when present and very rarely diagnosed when absent
3. overdiagnosis is a condition which is as frequently diagnosed when absent as often as when it is present. This is the bigger problem (Zimmerman et al 2008).

Section 3(b): why is misdiagnosis so prevalent?

(Hirschfield et al 2003) have historically reported that overall misdiagnosed cases of bipolar have run as high as 69%. (Zimmerman 2008) report that they diagnostic assessment guidance system for bipolar 1 / mania was eased after DSM IV to include activity and energy symptoms, and the cut off for hypomanic symptoms for example, was reduced, consequently, the percentage of new people meeting criteria for Type I and II increased by 47%. This supports the previous lack of

and shortcomings related to symptom definitions. (Phillips & Kupfer 2013) report that up to 60% of bipolar cases are mis diagnosed whilst seeking help for unipolar depression. (Stiles et al 2018) report the figure somewhat lower at 40%, however….(Shen et al 2018) report misdiagnosis rates as high as 76.8% in China. Of the 177 patients enrolled, 36 had mixed features, 53 had rapid cycling episodes, 51 had comorbidity with other disorders, and 17 were diagnosed with other specific bipolar and related disorders, denoting it's heterogeneous, multifaceted nature. (McLintyre & Carabrese 2019) have also reported that 64% of mis diagnosed cases happen in primary care settings, which suggest that practicing clinicians often fail to recognise the symptoms, particularly relating to mania and hypomanic or that they are not even observed and thus reported and simply go by unchallenged. The limited amount of time that some clinicians spend with patients also contributes to incorrect diagnoses.

The misdiagnosis of bipolar disorder is widely prevalent as further evidenced by patient surveys, administrative claims data and studies measuring clinicians 'diagnostic accuracy. (Zimmerman et al 2008, Shen et al 2018). The consequences of a missed or incorrect bipolar disorder diagnosis can have serious short and long-term repercussions for a patient. In their review of the literature, Rakofskey and Dunlop, (2015) undertook a systematic analysis of over-diagnosis and under-diagnosis rates calculated from all adult bipolar studies comparing patient reported diagnoses with diagnoses resulting from DSM-IV based structured assessments/checklists. Five of the 368 publications were selected using OVID medline and demonstrated under-diagnosis rates of 30-51% and over-diagnosis rates of 12-13%. These results contrast with earlier publications suggesting over-diagnosis of bipolar disorder occurred more

frequently than under-diagnosis. An in-depth analysis of the various mechanisms contributing to the over and under-diagnosis of bipolar disorder include limitations in the design of structured research interviews, racial and social bias, and memory impairment. See (Rakofskey and Dunlop 2015)

Section 3(c): Accounting for misdiagnosis

The question of over or under diagnosis is often debated. (Zimmerman 2008).

Overdiagnosis is the idea that a disorder is commonly identified both when it's there and when it's not. Conversely, under diagnosis means that a disorder is not always diagnosed when it is present and is also not always diagnosed when it is missing. Underdiagnosis and overdiagnosis are not claims of reliability, but rather claims of validity (based on a firm diagnosis based on pathology findings or, in the case of psychiatry, a formal research diagnostic interview) (whether clinicians agree on what they have diagnosed). Therefore, rather than evaluating the accuracy of prior diagnoses from scratch (based on clinicians' diagnoses rather than information from a study interview), we should start with some knowledge regarding diagnosis. Poor reliability simply implies that clinicians were unable to reach a consensus on the diagnosis. About actual rates of misdiagnosis, it doesn't say anything.

The main reason for mis-diagnosing bipolar disorder is mistaking it for unipolar or major depression. (Bowden 2005, Shen et al 2018, McIntyre et al 2020). Despite the DSM-5 diagnostic criteria for a major depressive episode being the same for unipolar and bipolar II disorders, the

respective episodes differ in their natural past history (ie, patients with bipolar disorders will have discrete episodes of hypomanias or manias, age of onset, suicide risk, associated comorbidities, and biological correlates. And, most importantly, they differ dramatically in the medications that are effective.) Thus, it is critical to diagnose them correctly. The fact that on the bipolar spectrum, bipolar depression remains the leading cause of morbidity in patients with bipolar disorder is corroborated by (Mitchell et al 2008), who report that at least 50% of patients initially present with a depressive episode. (See McIntyre & Calabrese 2019). Even with treatment, bipolar depression accounts for the majority of time spent unwell with the disorder and it is an important contributor to long-term dysfunction, psychosocial impairment and loss of work productivity. (McIntyre & Calabrese 2019) report high levels of over and under misdiagnosis, up to 69% were initially mis diagnosed, 60% of which was down to Major Depressive Disorder, with women more likely than men to be wrongly diagnosed. As the diagnostic criteria and symptoms for a depressive episode are the same in both bipolar depression and MDD, clinicians should be aware that specific symptoms have a higher probability of being associated with each diagnosis. (Mcintyre & Calabrese 2019) have also reported that 64% of mis diagnosed cases happen in primary care settings, which suggest that practicing clinicians often fail to recognise the symptoms, particularly relating to mania and hypomanic, or that they are not even observed and thus reported and simply go by unchallenged. The limited amount of time that some clinicians spend with patients also contributes to incorrect diagnoses. In both specialist and non-specialized healthcare settings, there are few research on the frequency of misdiagnosis and detection rates of serious psychiatric diseases. To the best of our knowledge, this is the first investigation into the frequency of

misdiagnosis and the rates of detection of serious psychiatric diseases, such as schizophrenia, schizoaffective disorder, bipolar disorder, and depressive disorders, in a specialist psychiatric setting. Ayano et al, (2021) report that the detection rates were highest for schizophrenia, followed by bipolar, depressive, and schizoaffective disorders. Having a diagnosis of schizoaffective and depressive disorders as well as suicidal ideation was found to be significant predictors of misdiagnosis.

Section 3(d): sub-threshold symptoms and mixed features

Bipolar disorder continues to be characterised by poor clinical and functional outcomes in many patients. Poor outcomes may be related to subsyndromal symptoms, defined as symptoms that fail to meet the full diagnostic criteria for a mood episode. Increasing evidence suggests that sub threshold symptoms of bipolar disorder (ie, depressive-like, hypomanic-like, or manic-like symptoms that do not meet diagnostic thresholds for depressive, hypomanic, manic, or mixed episodes) in patients with bipolar disorder, and thus not included in the diagnosis, are associated with shorter time to future relapse into full-blown illness episodes than in patients without such subthreshold symptoms. This finding emphasises the significance of the effects of subthreshold symptoms of bipolar disorder on the future disease course. (Phillips & Kupfer 2013). Another reason is a failure to thoroughly identify with a person’s specific family history of mania and hypomania; while another factor negatively influencing the prognosis is susceptibility to rapid cycling, in which patients have brief if any euthymic periods and a persistent symptomatic state is evident throughout the course of the illness. These facts allude to the pernicious nature of mixed features, so that the treating physician must be alert to their presence at all times.

Approximately 40% of patients with bipolar disorder experience mixed episodes, defined as a manic state with depressive features, or manic symptoms in a patient with bipolar depression experienced simultaneous or in rapid succession. Compared with standard bipolar patients, patients with bipolar mixed states generally have more severe symptomatology, more lifetime episodes of illness, worse clinical outcomes and higher rates of comorbidities, and thus present a more significant clinical challenge.

Given the substantial heterogeneity and wide range of symptoms that can and do characterise and typify bipolar disorder, together with an overlap of psychotic and affective symptoms, means the problem of diagnosis remains complex. Despite the best efforts of individual practitioners to support their patients, the pursuit of assessment validity is often sought at the expense of individual and subjective integrity, meaning mis-diagnosis frequently occurs, albeit, it is dressed up in a variety of ways. Being reliable often means following prescribed and unchallenged doctrines as a means of minimising any diagnostic differences. Once one follows a one size fits all, quantifiable and evidence based process, based on a strict set of operational criteria, supported by a formal list of officially sanctioned symptoms then anything outside this grace of reference remains invisible. A strict and discrete approach to diagnosis does not easily fit with the complexities of social interaction or the dynamical nature of temporal experience, that typify modern day mental health disorders, where adaptation and flexibility within an ever changing environment remain key components underlying our capacity to change and evolve

Part 2 - Mood disorders

Section 1(a): re-operationalising the diagnosis

A phenomenological lens views moods and the ‘affects ’and emotions that entail as encompassing phenomena that connect the body, the self, others and the world, (Fuchs 2005), which lies in contrast to current cognitive and behavioural opinion, which often classifies moods and emotions as mental states, almost exclusively within our mind. Neuroscientists often describe cognition and emotion as separable processes implemented by different regions of the brain, such as the amygdala for emotion and the prefrontal cortex for cognition. (Salamander & Fusi 2010)

Even now, a lack of knowledge about the nature of affectivity itself continues to obstruct research into affective diseases. In contrast to the cognitive and behavioural view of mood, the phenomenological perspective adopted in this study, is subjective in nature, viewed from the first and second person perspective, as it relates to what Husserl terms the lived and conscious experience, (Fuchs 2005), experiences that are imbued with emotional and affective content (Fuchs 2016, Aho 2013).

Previous studies on affect and mood have conflated the idea of pervasive moods with human emotions, into ‘a single ’condition, as if they were the same phenomena, viewing them together as being part of an elusive mental state, which might be better easier to reduce it to either some cognitive or volitional feature, or dismissed merely as epiphenomena (Dennett 1994). Traditionally melancholia as a

combination of irrationality and behavioural inhibition was justified and dismissed in this way. More recently, cognitive models have dominated psychiatric approaches to depression, viewing the disorder's core as a confluence of flawed information processing and skewed thinking (Beck 1975, Beck & Alford 2009).

Unlike our emotions, moods add another layer to the emotional life that permeates and colours all of our current experiences. Elation, euphoria, tranquilly, boredom, sadness, dysphoria, impatience, anxiety, or melancholy are common examples. Moods can be roughly described as general, essentially evaluating (i.e., pleasant or unpleasant), but non-intentional emotional states that make a person more likely to perceive themselves and their environment in a particular manner and act accordingly. Consequently, emotions are fundamental and emotional states of being in the universe that reflect "how things stand" in our lives and how we are inclined to respond to the current circumstances. Husserl asserts that affection is a broader type of experience that is strongly related to the contemporary idea of enactive affectivity (Thompson 2007). Everything we come into contact with has a relative pull on us, which causes our attention to be drawn to various degrees. Prior to any ego interference, everything we experience unconsciously has an impact on us. (1994, Depraz). I affect is foundational in this sense, which Heidegger equates with mood, consistency, affective receptivity to the world, and our sense of self. The temporal structure at play here as we move from the present pull, with which we are actively engaged, to an experience we keep as a part of our ongoing experience, exerts its own type of pull on actions that are planned for the future. The degree to which we participate in the experience also affects how we are

affected. In this way, affectivity is both subjective and dynamic, (Aho 2012) as well as being biological in nature. (Tretter et al 2011)

From an ontical perspective our daily matter of fact experiences are made up of real situations and circumstances, as we go about our lives, interacting and communicating with others, in the various ways we do in a physically constituted world. However, as we do so, according to Heidegger, we are always in some mood or other, which consciously conveys to us something about ourselves and our environment, something which always has a particular meaning, which we can always relate to a particular situation and context. Heidegger believed that our moods are fundamental modes of existence that are constitutive and thus reveal how we exist or find ourselves attuned to the world as well as how we are affected by others. In contrast to psychological accounts of moods, which are considered to be internal, subjective, mental states thought to be caused by one's external situation and can be inferred from one's outward behaviour, posture, or facial expression or sign, (Fuchs 2013)

From an ontological perspective on the other hand, Heidegger explains that "moods are not side-effects of cognition, volition, or action, but are something which in advance determine our being with one another" in Fundamental Concepts of Metaphysics (Heidegger 1995) notes that our moods are not only anything at hand, they are the very thing by which we experience the world. They are a fundamental means of being, a fundamental way of being-there, and this always directly entails being with one another. Heidegger helpfully compares moods to environments (Blattner 2006). We live in moods and atmospheres that are already present. They are not any sort of private, secret, or arbitrary states of

being. Instead, our perception of the world is filtered by our moods, and as a result, we are continually immersed in them. Moods are already present, but not in the sense that they exist separately from Dasein. Rather, emotions exist in the sense that they are a part of and integral to Dasein's own being. Alternatively, they are "basic ways in which we find ourselves disposed in such and such a way" (Heidegger 1995). In other words, they are "means of the being-there of Dasein." Moods not only influence and, to some extent, even decide how things look to us, but they also have an important, underlying revelatory dimension. In other words, moods serve as a backdrop against which the outside world is shown to us. It is crucial to emphasise two broad aspects of moods' disclosive character before expressing the special revelatory dimension of moods, or before describing what moods reveal to us. First, moods typically reveal themselves in a pre-reflective and unthematic manner (Heidegger 1992, Heidegger 1995). Despite being the unbreakable lenses through which the world is revealed to us, moods are rarely the centre of our attention; in fact, most of the time we fall into them without even recognising it. Heidegger prioritises affective revelation over theoretical disclosure, which is the second way they are disclosed: this way our thematic view of the world always occurs through the lens of a mood even when the presence of a mood passes unnoticed, making the former (pre-reflection) more "primordially revealing" than the latter themes, (Heidegger 1995).

Section 1(b): mood disorder and cognition

Bipolar illness and various other mood disorders were once thought to be strictly biological disorders that could be treated with CBT and drugs like lithium (Prien & Potter, 1990; Scott, 1995a; Scott & Colom, 2005).

This viewpoint is gradually shifting due to two factors. First, stress diathesis models have received more attention over the last three decades. (quote). New etiological models of severe mental diseases have been developed as a result, emphasising psychological and social factors of vulnerability and risk. Additionally, it has boosted the adoption of brief psychological treatments like cognitive therapy as a complement to medication for people with severe and persistent depressive disorders and treatment-resistant schizophrenia (Scott & Wright, 1997). Second, pharmaceutical treatments for bipolar disorder have a substantial efficacy effectiveness gap (Guscott & Taylor, 1994; Tacchi & Scott, 2005). In research settings, mood stabiliser prophylaxis shields roughly 60% of patients against relapse, but in clinical settings, it shields just 25% to 40% of patients from additional episodes (Dickson & Kendall, 1986). The prognosis has not improved despite the availability of newer treatments (Scott, 1995a; Tacchi & Scott, 2005). This has also raised awareness of alternative bipolar disorder treatment methods

According to Beck's original cognitive model from 1967, thinking habits that magnify mood swings might exacerbate depressive mood states. For instance, when someone is depressed, they tend to have a more pessimistic outlook on life in general and their own future in particular (called the negative cognitive triad). As a result, they frequently draw unfavourable conclusions, overgeneralize, see situations as either all or nothing, overly personalise situations, and place undue blame on themselves (cognitive distortions). Mood swings and negative thoughts can induce or have an effect on changes in behaviour, such as the avoidance of social interaction. Cognitive vulnerability to depression is hypothesised to result from defective underlying beliefs (such as "I'm unlovable") that guide thinking and behaviour and evolve from early

learning experiences. It is believed that certain life events that hold particular significance for a person may cause these beliefs to become active. For instance, someone who believes "I'm unlovable" may become depressed when they receive rejection from a significant partner. According to Beck's initial description, mania is a mirror image of sadness and is distinguished by positive cognitive distortions as well as a positive cognitive triad of self, world, and future. The self was viewed as being incredibly lovable, strong, and beautiful, with limitless potential. Experiences were overly good, and the world was full with fantastic opportunities. The future had countless possibilities and promises. Cognitive distortions, similar to those in depression but going in the other way, were typical of hyper-positive thinking (stream of consciousness). For instance, assuming the best, as in "I'm a winner" and "I can do anything," underestimating hazards as in "There's no danger," downplaying issues as in "Nothing can go wrong," and placing too much value on the now, as in "I will do this now." Thus, the optimistic cognitive triad of self, world, and future was biasedly confirmed by cognitive distortions. It was hypothesised that by selectively focusing on positive experiences, underlying beliefs and self-schema that direct behaviours, thoughts, and feelings would be upheld and enhanced. Such underlying assumptions and self-schema include, for instance, "I'm exceptional" and "Being crazed helps me to get over my shyness”.

The model of unipolar disorder has served as a basis for the majority of investigations on cognitive models in bipolar disorder. Cross-sectional studies comparing bipolar illness patients with other client populations on traits including dysfunctional beliefs, self-esteem, and cognitive processing made up the early research.

With the exception of one early study, the findings on dysfunctional attitudes in bipolar disorder patients who were not now manic show a pattern that is similar to that of patients in the euthymic and depressed periods of unipolar disease. Unfortunately, there was little information on how people's moods changed during the manic phase. Using the Dysfunctional Attitudes Scale (DAS; Weisman & Beck, 1978), Silverman, Silverman, and Eardley (1984) investigated dysfunctional attitudes in a diverse clinical sample and hypothesised that individuals with bipolar disorder who were currently euthymic showed lower levels of dysfunctional attitudes than all other diagnostic groups. However, Scott, Stanton, Garland, and Ferrier found no evidence to support these conclusions (2000). According to research by Silverman et al(), both unipolar and bipolar participants had an increase in dysfunctional attitudes during a depressed period. This result was corroborated by Hollon, Kendall, and Lumry (1986), who found that those with unipolar or bipolar depression had higher levels of dysfunctional attitudes and pessimistic automatic thoughts than healthy control subjects. When people were depressed or in remission, there were no discernible differences between the unipolar and bipolar groups

The pathophysiology of mood disorders has recently been described in terms of defective brain systems that support and underlie neurocognitive activities, according to a number of neurocognitive models originating from the psychiatry and psychology schools of thought. (quote). The translation of these models and their application within the clinical setting have been constrained—partly due to a lack of integration and synthesis—even though they have been helpful for increasing our theoretical understanding and facilitating significant areas of research. A fresh viewpoint on understanding and modelling mood

disorders is provided by cognitive neuroscience. In the neurocognition of mood, the majority of models identify comparable neural networks, brain areas, and neuropsychological processes; however, they differ in terms of the precise functions associated with neural processes and how these interact. Additionally, there is insufficient integration of cognitive biases, reward processing and motivation, rumination, and mood stability, all of which have a substantial impact on how attention, appraisal, and response processes are used in mood disorders. Understanding the interconnections between these extra factors improves our knowledge of the pathophysiology and aetiology of mood disorders. A framework for study that may be applied to the diagnosis and treatment of mood disorders can be developed by integrating important cognitive functions and understanding how they interface with brain functioning within neurocognitive models of mood disorders. (Malhi et al 2015). Cognitive impairments are a recognised component of the mood disorder symptomatology. The precise profile of these deficiencies, including the most impacted domains, their causes, and their connections to clinical subtypes, remain unclear. Results indicate a mild deficit across a number of domains in BD and MDD rather than the occurrence of domain-specific deficiencies. Even with regard to the impact of mood state, the data on clinical mediators is contradictory to say the least. (Porter, Robinson, Malhi, and Gallagher 2015)

Section 1(c): situated cognition

The concept of situated cognition, commonly known as "4E cognition," holds that cognitive processes are intrinsically situated within a contextual framework made up of a corporeal (embodied), affording (enacted), physical (extended), and social (embedded) environment

(Newen et al., 2018; Overmann and Malafouris, 2018). For a more thorough analysis of the connection between cognition and temporality, see Vogel et al. 2020. Situated cognition focuses on examining, interpreting, and explaining the processes underlying cognition within situations defined by these categories because the categories of 4E cognition are by definition intertwined and inseparable from the processes they constitute. This emphasises the complexity and interdependence between one's experience and an accurate description of it. Here, Husserl's comparison of a melody and the pre- and reflective nature of awakening and unfolding temporal experiences are brought to our notice. (Fuchs). For instance, the opening and last notes of a musical performance may be seen as the performance's frontiers. However, the temporal context can go well beyond the strictly defined time of the musical performance, i.e., behind the walls of the theatre or music hall where we were seated. In actuality, the experience might have started even before one went to the event.

All four aspects of situated cognition are theoretically constrained by reduction: embodiment is reduced to the idea of a cognitive process as placed in a location, which coincidentally is a body or a brain; enaction is reduced to a simple nonrecurring computation of inputs and outputs; extendedness refers to a merely spatial distribution of cognitive subfunctions rather than explicitly to temporal extension; and finally embeddedness may simply correspond to geometric relation. Nonetheless, time is integrated into our historical past and embodied in our daily experiences, (Vogel et al 2017) and it is stretched in space to be saved for future use or to be used against us through present-day, future-focused activity (Menary, 2008). (Gallagher et al, 2017).

Similar to how time is dynamical, which will be discussed in more detail in the next section, our mood is not a static mental state or entity that can be readily separated from its experiential environment and recognised solely by internal or external reflection on one single level. (Fuchs 2013). Our moods are too immediate and intimate, we are attuned to them, too close, and too involved for any person experiencing them to recognise them as such, they pervade the atmosphere and thus must first and foremost be understood as a pre given and pre reflective global method of feeling anything significant in order to comprehend it in all of its complexity. Nothing can be taken at face value in these circumstances. See (Parnas et al, 2013). Examining mood disorders requires a thoughtful and rigorous investigation (Jaspers). One method of accurately recognising symptoms is to gain access to a person's consciousness. This allows for a more accurate subjective disclosure and description of a person's temporality. In other words, it takes more than a superficial description of a so-called mental condition, such as I'm feeling sad, forlorn, and very low in energy, to necessarily point to depression, mania, and/or bipolar disorder. This is because traditional structured interview / tick box techniques are typically not accessible to seeing symptoms determination as a meaningful whole. (Fuchs 2005).

Our emotions involve a certain amount of deception. There is a propensity to withdraw from particular circumstances and from a region of already defined future possibilities. For instance, when a loved one rejects you and you start to feel unhappy, you might start getting involved in a lot of other things. By employing oneself, one conceals the truth while losing sight of one's veracity; also, one fails to consider the significance of being here and being required to be there. Daesin runs away from itself! Instead, it falls into the nervous world of worry

(Heidegger 2001). When one retreats in the face of anything, nevertheless, one cannot escape. There are several ways of turning away that are not equivalent to running or falling. Daesin recognises itself for what it is by turning away. Moving away from the mundane requires moving toward one's existence and, in doing so, bringing one's innermost potential into focus. (Heidegger 1995) reveals this relationship in his concept of anxiety.

Section 1(d): mood and anxiety

Anxiety has been researched from a variety of cognitive, physiological, and even neurological perspectives. According to (Daviu et al., 2019), the connection between the two has a neurological foundation because noradrenergic projections from the locus coeruleus to the basolateral amygdala can mediate anxiety that is triggered by acute stress. From an ontological standpoint, this and many other approaches concentrate on the stimulus or the response that an individual experiences as a result of this stimulus. In general, anxiety is best understood as stress, or "an emergency state of an organism in response to a challenge to its homeostasis." Stress is defined as "an alteration of the normal physical and/or psychological homeostasis in response to external negative events that induce a state of pressure and tension in the individual" (Daviu et al., 2019). Stress or stressors are defined as the unfavourable occurrences themselves.

Stress can be defined as "a particular relationship between the person and the environment that the person perceives as exhausting or exceeding his or her resources and harming his or her wellness," for a more dynamic definition (Butler, 1993, Thompson 2007, Fuchs 2013).

Responses to acute stress can be influenced by chronic or early life stress, and they are frequently simpler to examine experimentally. Despite this, anxiety has long been a significant comorbid component linked to bipolar disorder and serious depression. Kessler and colleagues (2003), Kessler, Chiu, Demler, & Walters (2005), and Kessler, Merikangas, & Wang (2007) are a few examples. According to Goldstein-Piekarski et al. (2016)'s research on the comorbidity of anxiety, 60% of patients with an anxiety disorder had one or more additional anxiety or depression diagnoses.

Anxiety can be seen as "a temporally diffused emotional state generated by a potentially dangerous event, with the probability of occurrence of harm being low or ambiguous" or "the expectation of a future threat" from a temporal perspective (Daviu et al., 2019). Although primary anxiety is also a type of stressor, stress can also induce it (Ray et al., 2017). If this is the case, anxiety would be a highly common occurrence and have extremely serious repercussions for overall health and wellbeing.

According to Heidegger, anxiety is a fundamental feeling that arises or emerges out of and in the middle of our daily practices, rather than merely a stressor relating to family or work that we all have to deal with on a fault-basis. Anxiety arises from our own existence and the meaning we attribute to our experiences, which we cannot escape from, rather than from anything we strictly speak encounter in the environment. Heidegger claimed that Daesin itself is the source of anxiety. When one is nervous, they are not worried about some financial potential, for instance, but rather about the possibility of becoming someone other than their current self, always looking ahead. Our daily worries finally

lose importance when we are experiencing anxiety. The world that is revealed to us is strange and unsettling! Nowhere makes one feel at home. Anxiety reveals Daesin as being the only type of thing that it is capable of being on its own. Daesin forces a person to confront their existence and their own selves. It provides context for the phenomenon of drifting away from one's own potential. In daily life, one runs less from things that are already in motion and more from what anxiety manifests as. There is always a chance that nervousness will manifest itself. The mood of anxiety serves as the foundation for all other moods, such as dread or other affective experiences of the world.

Section 1(e): mood and fear

When considered from the standpoint of general anxiety, fear involves a variety of structural modifications that can be social, psychological, anthropological, or cultural. Saha et al, (2021) acknowledge the broad based basis of each disorder as they relate to anxiety and mood, seeing them not only as separate conditions but separate disorders, which often co-occur somehow to create a comorbid state. They state that having one disorder enhances the chances of having the other. This perspective differs somewhat from Heidegger’s view that our moods are all pervasive and we are always in one mood or another, and that being anxious merely means we are in an authentic state of existence, which as we become more aware of, can help guide, even become pre-requisite for our everyday existence for potential and possibility. (Magrini 2006).

Not only are moods the pre-requisites for our emotions, because they ‘affect ’us meaningfully, but also for the majority of other intentionality

driven states. (Elpidorou & Freeman, 2015). To feel as though things in the outside world matter to us, we need to be in the right frame of mind. Moods are not just ‘affective ’colourings of a universe that has been pre-observed and experienced. Rather, moods are fundamental affective states that enable thoughtful interaction with the world; they allow us to see the world more clearly and reveal it to us as a world that is rich with the things and people that matter to us. If moods are the foundation that first allows for perspective, then moods are required for emotions. A reality that matters to us already is what is necessary for feeling. In a universe where nothing matters to us, love and terror have no significance. (Aho 2013).

Section 1(f): the subjective and experiential nature of moods

The Mood Disorder Questionnaire, adapted from (Hirschfield et al 2000) and other mood disorder related assessment tools are useful tools, often used as starting points for diagnostic evaluation. The Mood Disorder Questionnaire (MDQ) at its time of inception recorded good validity scofesv(Williams 2017), and although it remains an established screening tool for bipolar spectrum disorders (BSD), it has not been validated in diverse populations and the best scoring method remains uncertain. (Dupont et al 2020). This seems to bring the question of methodological suitability and validity to the fore, something which seems to have become blurred and somewhat of a secondary factor behind inter-rater reliability and the evolving de-humanising of the system. (See Andreason 2007). Significantly, failing to address and understand the ontological and affective nature of subjectivity and affective moods, as well as failing to measure the epistemological problems associated with the conceptual limitations relating to our

motion of normal and abnormal experiences of time for eg, is most likely due to a large extent to an over reliance on tradition, as well as traditional research methods, which continue to be dominated by neuroscience, behaviourism and cognition, and which as a consequence tend to govern the operational side of psychiatric diagnosis. (Parnas & Gallagher 2015)

Section (g): the distinction between normal and abnormal moods

A central aim of the DSM task force was to set appropriate cut-off points between what is considered “normal” from what is “pathological,” in order to treat the individuals belonging to the latter category. The concept of pathology is an a priori definition, originally based on statistical distribution (the “S” in DSM), with an arbitrary decision that is not scientifically driven (Frances, 2013, p. 24). In fact, the criteria set for cut-offs between “normal” and “pathological” (e.g., number of symptoms, frequency and duration of symptoms, and nature/duration of dysfunction associated with the proclaimed disorder) are also “arbitrary” and subjective because there is no laboratory test or biological markers to set the boundary between “normal” and “pathological.” (quote). In addition, there is no scientific link between basic science (e.g., cognitive, neurological and social science) and clinical psychiatry. Second, cultures differ dramatically in their conception of normality; what is “normal” in one culture can be considered “abnormal” or “pathological” in another one.

In adopting Husserl’s ontological view of normality, one cannot within the present context analyse it quantitatively, as it’s nature is constituted by experiential, social and existential structures, a dimension which

phenomenology allows us to disclose.normal to one person may be abnormal to another. Husserl also reminds us of the need for concordance between experiences as well as a sense of optimality of an individual experience, when analysing normality, and there are significant within-and-between cultural differences in the manner in which diagnostic categories are interpreted and diagnostic labels are used (e.g., Zubin, 1967; Rosenhan, 1973; Crow, 1986; Zinbarg et al., 1994; Keller et al., 1995). Sense constitution as well as being a methodological consideration is a dynamical process, as are all phenomenological concepts of normality and abnormality. The importance of context should not be underestimated either. (Heinamaa & Taipale 2018). (See also Khoury et al 2014)

The relationship between normal and abnormal moods could otherwise be regarded as: (1) "normal" and "abnormal" being two distinct categories, or (2) "normal" and "neurotic" could belong to one category, while "psychotic" to another, and, or (3) there is a continuum stretching from "normal" followed by "neurotic" to "psychotic" and "abnormal" constituting the other pole of the dimension of (ab)normality (Gross 2005).

The first view is deeply rooted in the long psychiatric tradition, the second one is a sort of compromise whereas the last one is in line with the psychometric tradition. Furthermore, the concept of discrete categories as opposed to dimensional conceptualisations might be closely related to several other dichotomies: qualitative vs. quantitative differences, clinical observation/ experience vs. the arsenal of research tools, psychopathology vs. personality psychology, clinical vs. control populations

Section 1(h) bordering on normality / abnormal

The principal manuals for psychiatric diagnosis have recently been updated (ICD-11 was released in June 2018 and DSM-5 was published in 2013). A common diagnostic quandary is the classification of people with chronic low mood, especially those with repeated self-harm (‘emotionally unstable ’or ‘borderline ’personality disorder). There has been a great interest in use of type II bipolar affective dis- order (‘bipolar II disorder’) as a less pejorative diag- nostic alternative to ‘personality disorder’, despite the radically different treatment options for these disorders. DSM-5 (but not ICD-11) clearly distinguishes between borderline personality disorder and bipolar II disorder, indicating that intense emotional experiences (such as anger, panic or despair; irritability; anxiety) should persist for only a few hours in people with a personality disorder. ICD 11 is less prescriptive.

There is significant diagnostic overlap with emotionally unstable/borderline personality disorder and bipolar disorder (Perugi et al 2011, Eich et al 2014, Coulsten et al 2012, Zimmerman et al 2022), with several common features, such as impulsivity, mood instability, inappropriate anger, suicidal behaviour and unstable relationships reported.

The recent history of psychiatric classification has oscillated between the placement of dysthymia and cyclothymia as mood disorders (state disorders) or as person- ality disorders (trait disorders). Similarly, of the bipolar affective disorders, bipolar II disorder has many features suggestive of a chronic trait disorder (such as dysthymic mood) rather than an episodic state disorder (typified by bipolar I disorder). The

problems with classification reflect practical difficul- ties in clinical diagnosis. The reliability of these manualised diagnostic categories is also imperfect. The reliability of the diagnostic categories for DSM-5 from field trials are reported from eleven academic centres involving 264 patients (Regier 2013). The correlation between clinicians varied from 0.28 (questionable reliability) for major depressive dis- order to 0.54 (good reliability) for borderline person- ality disorder. By contrast, field trials for ICD-11 involved 28 centres in 13 countries with over 1800 patients and 339 clinicians (Reed 2018). Intraclass kappa correlation coefficients for selected disorders ranged from 0.45 for dysthymic disorder to 0.64 for a depressive episode (in other words, good reliability for both). (See Lucy 2020)

Research into whether BPD belongs to the bipolar spectrum have reached differing conclusions. (Smith et al) suggested that a strong case could be made that a significant percentage of patients with BPD fall into the bipolar spectrum, and (Belli et al) concluded that the two disorders are closely linked in phenomenology and treatment response. (Antoniadis et al) and (Coulston et al) on the other hand, did not draw a conclusion regarding BPD's inclusion on the bipolar spectrum, whereas (Paris et al) and (Dolan-Sewell et al) concluded that empirical evidence did not support BPD's link to the bipolar spectrum. (Sripada & Silk) reviewing neuroimaging studies, noted that there were some areas of overlap and some differences between BPD and bipolar disorder. Some of the authors of these reviews noted that few studies have directly compared patients with bipolar disorder and BPD, and they called for such empirical data to help clarify the relationship between the two disorders for further research into this area of discussion. (See Zimmerman et al 2022)

Section 1(i): mood disorders and the continuum concept

Health authorities around the world continue to face difficulties in making an accurate diagnosis of mood disorders. Bipolar affective disorder, which affects about 60 million people globally, and major depressive disorder, which affects around 300 million people, are substantial contributors to functional decline, disability, and suicide. The reliability of the diagnosis of major depressive disorder, however, was shown to be in the range of "questionable" in the reliability studies that led to the updated Diagnostic and Statistical Manual, Fifth Edition (DSM-5) manual. The sample size of the people selected to validate bipolar II disorder was insufficient to prove reliability, despite the reliability of the diagnosis of bipolar I condition in the same trials being "excellent". The fact that bipolar I and bipolar II disorders have similar epidemiological prevalences suggests issues right away. (2017) Kalk & Young

The notion that "A shift in affective framing changes not just how one perceives the world but also what one remembers, how one engages in practical reasoning, and how one relates to other people" emphasises the close relationship between temporality and affectivity as understood and proposed by (Husserl 2001). Maise (2016, p.4) (2016, p.4). According to enactivists, phenomenologists, empirical scientists, and therapeutic practitioners (Gallager & Lenzo 2010, Thompson 2007), when our experiences of temporality are altered, an affective disorder is the result. "By attachment, we interpret the particular pull that an object presented to consciousness exerts on the ego, the attraction imparted to consciousness. Favoritism is a requirement for affection. 196 (Husserl,

2001). It involves fundamental shifts in our beliefs, the reasons why things matter to us, and our core motivations. 2010 Ratcliffe

Because of the potential treatment implications and the life long changes in quality of life patients experience as a consequence of mis diagnosis, (see Zimmerman et al 2022), if for no other reason, it is clinically important to recognise both bipolar disorder and BPD in patients seeking treatment for depression, and it is important to distinguish between the two. However, this presupposes that each is a valid diagnostic entity.

During the past 20 years there have been increasing suggestions that BPD should be conceptualized as part of the spectrum of bipolar disorder. Advocates of the bipolar spectrum suggest that treatments that have been found effective in treating bipolar disorder should be used when treating patients with BPD because of its inclusion on the bipolar spectrum.

There are several arguments in favour of viewing mental health and illness as a continuum including differentiating between disorders, which have some aspects of close resemblance like bipolar disorder and borderline personality disorder. (Fuchs 2007) differentiates between the two by explaining how in bipolar, our moods are more prevailing and more long lasting, while borderline personality disorder tends to experience more fleeting episodes which tend to be more emotionally driven.

It would certainly support a mixed features diagnosis too, where opposite polarity symptoms are observed in the same mood episode, certainly questions the bipolar/unipolar splitting of mood disorders,

supporting a spectrum view, particularly given the the distribution of intradepressive hypomanic symptoms between bipolar-II (BP-II) and major depressive disorder (MDD) depressions. (Benazzi 2006).

Comorbidity is also very common in bipolar disorder. Approximately 75% of patients with bipolar disorder are diagnosed with an anxiety disorder at one time in their life; 42.3% are diagnosed with a substance-use disorder and 62.8% with an impulse control disorder, while approximately 60% are diagnosed with a personality disorder. Some medications used to treat common neurologic disorders may induce depressive or manic/hypomanic symptoms, and, conversely, some medications used to treat major depressive disorder or bipolar disorder may cause neurologic side effects. It is not surprising that somatic treatments developed to treat neurologic illnesses are now being applied to the treatment of mood disorders. This convergence represents the future of treatment for many patients whose underlying brain dysfunction may manifest itself with a myriad of different symptoms and require a more integrated approach to their care. (Rakofsky & Rapaport)

Section 2 - Comorbidity and the continuum conundrum

Section 2(a): the problem of comorbidity, the rule not the exception

Introduced by (Feinstein in 1970) comorbidity relates to the simultaneous presence of two or more distinct, independent and seemingly unrelated disorders. (McGrath et al 2020). The ‘Conundrum of Comorbidity ’idea relates to where the DSM falls short as a ‘Psychiatric Diagnostic Tool ’for accurately assessing relationships between disorders. The problem of comorbidity is an extensive one, and not just

because it’s pervasive nature where mis-diagnosis is concerned, in terms of the number of reported cases of misdiagnosis. The real problem is that comorbidity is now the rule and not the exception, according to (Dalgleish et al 2020).

When discussing why comorbid disorders are a prominent flaw in the current diagnostic system, it is important to note that the prevalence of people who experience symptoms associated with multiple disorders may not be the real issue. The problem that plagues the field of psychiatry is how these patients are handled, and how the system of diagnosis fails them and can lead to unnecessary and/or unhelpful treatment plans. The term “commorbidity” is used to refer to both people who experience the symptoms of multiple disorders and to the greater-than-chance probability that people diagnosed with one disorder will be diagnosed with another due to correlations between symptoms (Krueger & Markon, 2006). The lack of differentiation between the two is problematic, because one is a population in need of treatment, while the other is a taxonomical error.

Section 2(b): implications for diagnosis

The term diagnosis comes from the Greek word ‘knowledge ’and is basically the medical application of the process of prior classification. It is ubiquitous in science and has been the cornerstone of modern clinical knowledge and practice for centuries. Diagnosis in psychiatry started in Europe in the late 17th century, starting off by being informed by systems that classified animal and plant species as part of other natural sciences. (quote). Psychiatric nosology, traditionally represented by the ICD and DSM manuals, as the accepted gold standard, is fundamentally

and historically based on categorical diagnoses that are intertwined with the key clinical dichotomies that characterise the realm of clinical somatic based medicine (e.g. with a general view of, to treat or not to treat, based on simple empirical observations). Most notable is William Osler, mainly for his influence on medical training and practice, including setting some of the first precedents for evidence based medicine. (Greenstone 2009).

One of the earliest empirical challenges to face DSM-III (1980) and its successors was comorbidity. Most individuals who meet diagnostic criteria for one disorder meet diagnostic criteria for a second disorder; (Zimmerman et al 2022) and most who meet the criteria for two meet criteria for a third; and so on. Such high rates of comorbidity that have been reported, suggest the possibility that there may be a more parsimonious structure to psychopathology than implied by nosologies that identify many separate and distinct disorders. In the mid-1990s, clinical scientists called on researchers to study patterns of comorbidity in order to “elucidate the broad, higher-order structure of phenotypic psychopathology”. Some of the early research in this area was done in respect of autism. It can be difficult to distinguish between a condition that could be caused by autism spectrum disorder (ASD) and a concomitant psychopathological illness because ASD can present with other disorders occurring at the same time. It can also affect our social understanding, our sensory capacity and ability to adapt. (Leader et al, 2021)

Comorbidity continues to undermine the validity of diagnosis by both classification of a group of disorders, and within single categories. Significantly it seems, single uncomplicated clinical presentations are a

distinct thing of the past. (Dalgleish et al 2020). Consequently, the dire implication is that those suffering from more than one condition are those assumed to be the most vulnerable; which may relate to a significantly higher number than has previously been accounted for, resulting in higher rates of suicide, social exclusion and reduced quality of life. (Moscato et al 2016) noted that the way DSM 5 classifies disorder lends itself to comorbid diagnosis. In terms of diagnostic frailties, the problem is not necessarily the resultant number of comorbid cases, but rather the system's capacity to validate diagnosis and treatment to its patients. Careful observation may be lacking in the face of clinical assumptions based on pre existing set criteria. Nearly half of the symptoms lister in the DSM are connected to more than one diagnosis. To confound this it narrows the scope of each disorder by banning the diagnosis of disorders with symptoms that are already explained by existing diagnoses.

The co occurrence of anxiety and depression for e.g. does not qualify for comorbidity; that is to say, either they are symptoms of the same condition or their co occurrence reflects the idea that one condition is causing another? Where anxiety per se is caused by the mixed state. The hierarchical proposition is less pertinent to mood or psychotic disorders than it might be to personality disorders. Dimensionality on the other hand is relevant to both ideas, in the search for common features.

When someone presents with a profile of problems that satisfy the criteria for more than one diagnosis at a time, then that is not a problem per se for the current diagnostic model, as it can assimilate the possibility and presence of secondary diagnoses and/or complications of primary diagnoses that may be woven into the fabric of psychiatric

taxonomies since the outset. However, what is of greater concern is that epidemiological findings reveal that comorbidity among psychiatric diagnoses is most likely now the rule rather than the exception, and single, uncomplicated clinical presentations are actually relatively scarce (Kessler et al., 2005).

Thus comorbidity is associated with greater clinical severity and functional impairment (Wittchen et al., 2011), higher rates of symptom chronicity (Rapaport, Clary, Fayyad, & Endicott, 2005) and a greater detriment to overall quality of life (Hofmeijer-Sevink et al., 2012). This “rampant” (Clark, Cuthbert, Lewis-Fernández, Narrow, & Reed, 2017) diagnostic comorbidity suggests that the normative coexistence of psychiatric disorders must, to a considerable extent, be of one’s own making (see Maj, 2005), arising one might say, from the structure of the categorical classification system itself, rather than the co-occurrence of genuinely separable syndromes (van Loo & Romeijn, 2015).

Section 2(c): solutions to the conundrum

The comorbidity debate has generated considerable interest regarding any potential overlap between mental disorders and the relationships between normative variation and psychopathology. Typically DSM 5 offers two solutions to the problem of comorbidity:

1: Diagnose multiple co occurring independent disorders, either simultaneously or over time
2: Diagnose hierarchically, i.e. where one diagnosis takes precedence over others. For e.g., DSM5 describes depression and anxiety as possible features of schizophrenia in addition to co occurring disorders.

The one promotes fuller information than the other parsimony. (See Cowan & Mittal 2021). Transdiagnostic models are increasingly relevant as psychosis research focuses on the CHR state, aiming to identify early risk indicators, understand the pathogenesis of psychotic disorders, and develop early interventions. (Fusar-Poli et al 2013)

Section 2(d): a trans diagnostic approach to comorbidity

Inherent in this form of diagnosis is the problem of and the solution to comorbidity. Put simply this approach looks to account for by broadening the disorder, firstly as an internal one, and working outwards, grouping related syndromes in order to communicate sufficient descriptive information, to form a whole and more integrated diagnosis. (Dalgleish et al 2020). Despite a longstanding and widespread influence of the diagnostic approach to mental ill health, there is an emerging and growing consensus that the current psychiatric nosologies may no longer be fit for purpose, in respect of research and clinical practice. In their place, there is gathering support for a “transdiagnostic”. This approach cuts across traditional diagnostic boundaries or, more radically, sets them aside altogether, to provide novel insights into how we might understand mental health difficulties. Transdiagnostic interventions have been developed initially to address obstacles and constraints to the dissemination of evidence-based psychological treatments. Barlow et al, (2017) report that the impact of these interventions on public health has been modest despite the emergence of effective evidence-based psychological treatments for anxiety, mood, and related emotional disorders. The difficulty of teaching clinicians how to effectively use various manual-based interventions for each unique

case of anxiety, depression, or a related disorder (single-disorder protocols) and the criticism that these protocols lack external validity are two of the main obstacles to widespread dissemination and implementation. One strategy they propose is to create therapies that are transdiagnostic in nature, that can be used to treat numerous linked illnesses; preliminary results show promise. The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP) targets temperamental traits, primarily neuroticism and the consequent emotion dysregulation, which underlie all anxiety, depressive, and related disorders. It consists of five main modules or components. This strategy could streamline training initiatives while also addressing concerns about generalizability to routine care settings by simultaneously accommodating comorbid emotional disorders. It does this by addressing shared mechanisms associated with neuroticism, specifically negative evaluation and avoidance of intense emotional experience. Such a strategy might improve access to EBPTs for the most prevalent psychiatric conditions.

The current diagnostic system, DSM-5, distinguishes anxiety disorders (specific phobia (SP), social anxiety disorder (social phobia; SO), panic disorder (PD), agoraphobia and generalized anxiety disorder (GAD)), obsessive-compulsive and related disorders, and trauma- and stressor-related disorders (for example, post-traumatic stress disorder (PTSD). It is presumed that these are independent and discrete disorders, as is major depressive disorder (MDD). Yet, the symptoms often overlap across diagnoses and can vary substantially within diagnoses. (Goldstein-Piekarski et al 2016).

Reflecting these concerns, the Research Domain Criteria (RDoC) initiative is fostering trans-diagnostic research that is explicitly agnostic with respect to filtering by traditional diagnoses to evaluate brain-based mechanisms of dysfunction for eg, that may cut across these diagnoses. (Cuthbert 2013, 2014). However, standard practice in treatment outcome studies has been to focus on a particular discrete diagnosis and rule out comorbid disorders. For example, up to 80% of patients with comorbid conditions are excluded from treatment studies and schizophrenia. (Humphreys 2014). Anxiety disorders are highly comorbid with each other and with other serious mental disorders, particularly mood disorders (Shaffer et al 2012). The current diagnostic system, DSM-5, distinguishes anxiety disorders (specific phobia (SP), social anxiety disorder (social phobia; SO), panic disorder (PD), agoraphobia and generalized anxiety disorder (GAD)), obsessive-compulsive and related disorders, and trauma- and stressor-related disorders (for example, post-traumatic stress disorder (PTSD). Thus, an important step towards supporting a complementary RDoC framework for the spectrum of anxiety psychopathology and its comorbidities might be to further characterize: (i) the extent of comorbidity across anxiety disorders and (ii) the nature and impact of exclusion criteria in anxiety disorder studies of pharmacotherapy, psychotherapy and their combination. (Goldstein-Piekarski et al 2016)

Removing the distinctions between proposed psychiatric taxa at the level of classification opens up new ways of classifying mental health problems, suggests alternative conceptualisations of the processes implicated in mental health, and provides a platform for innovative new ways of thinking about onset, maintenance, and clinical treatment and recovery from experiences of disabling mental distress. The somatic

model of medicine requires adapting and modernising. One cannot calve up mood and other mental health disorders into pieces and then sew them back up again. This is not the way forward for mental health problems where it is generally accepted that causes are not only complex, multiple and interactive but as yet poorly understood (Kendler, 2008, 2012). What we know is that mental ill health prototypically emerges from an interplay between a myriad of biological, behavioural, psychosocial, cultural and experiential processes that do not respect established diagnostic boundaries, where the interactions are multifarious, and modulated by an individual's lifelong embodied and embedded experiences of an inter subjective world. (Fuchs, Sass et al)

Dimensional models of psychopathology account for widespread comorbidity between disorders. Early models assumed that two or three dimensions best explained the high rates of co-occurrence between disorders in both adults and children (e.g., Achenbach & Edelbrock, 1981; Kendler et al., 2003; Krueger, 1999; Wright et al., 2013). Considerable covariation between these early dimensions led to the development of contemporary frameworks that conceptualize psychopathology as multiple hierarchically organized transdiagnostic dimensions (e.g., Caspi et al., 2014; Kotov et al., 2017; Lahey et al., 2012; Michelini et al., 2019; Patalay et al., 2015). These frameworks (e.g., the Hierarchical Taxonomy of Psychopathology [HiTOP]; Kotov et al., 2017) include a general factor of psychopathology, which sits above spectra that align with broad internalizing and externalizing factors. These spectra then become progressively more specific, breaking down into lower-order dimensions that align with subsets of traditional diagnoses or disorders that tend to co-occur (Slade & Watson, 2006),

and then into symptom components or individual symptoms as the lowest tier of the hierarchy. (Holmes et al 2021)

The Internalising Factor Model (IFM) represents a general latent liability that accounts for higher than normal rates of comorbidity between mood disorders and anxiety disorders. (Andrews 2018). In dimensional models that include this factoring, comorbidity is addressed by the groupings of related syndromes that are commonly comorbid beneath a higher order dimension. The same applies to the externalising factors like anti social behaviour, impulsivity and substance misuse; as well as disorders identified by psychosis, delusion and paranoia. This broad spectra approach does not negate the need for a specific diagnosis, however, the inclusion of higher order dimensions in a diagnostic model helps address the uncertainty of comorbidity.

Section 2(e): Hierarchical Taxonomy of Psychopathology (HiTOP). (See Kotov et al 2017)

The primary goal of HiTOP is to capture biological, psychological, genetic, neuro scientific as well as phenomenological related etiology of psychopathology to help improve clinical practice. Any level of this model can help support both etiology and explain various mental health disorder outcomes. Composed of a series of hierarchical spectra each higher order level is broadly inclusive and heterogeneous; while homogeneity increases with each level of specificity. See Conway 2019. The lowest order dimension relates to the basic signs and symptoms a

person is experiencing. Kotov 2017 explains the structure of symptoms, in terms of where two patients are reporting the specific symptom of performance anxiety would also share the same symptom component / trait of anxiety, which is characteristic of panic disorder and, or phobias; both of which also fall under the fear factor as per the internalising factor model and other related models. Conversely the same two patients presenting under the DSM categorising system, within the same syndrome of panic disorder, might share higher level spectra but have completely different lower level dimensions, or individual symptoms in other words. Those who share lower order diagnoses will have much more in common. Maladaptive trait variants and symptom components are easier to identify with than individual signs and symptoms because they are less specific in nature and tend to be well modelled. (Kotov et al 2017) offer the t factor model as an example of how to measure the presence of maladaptive components and trait variants. One might consider distortions in time as a maladaptive and dysfunctional variant, and as a means of better predicting psychopathological disorders.

The taxonomy of disorders listed within DSM 5 fall into the syndrome category. However individual symptoms span across many multiple syndromes. That is to say they do not simply characterise individual disorders. Symptoms in HiTOP are grouped into syndromes based on genetic predispositions, which can be determined through genetic testing rather than arbitrary categories. (Ruggero et al 2019). This model is more useful in this sense than the DSM system, in that it can recognise and incorporate similarities between disorders; and although similarities are useful, distinctions between the disorders, such as temporal differences) are crucial in capturing individual and specific psychopathology. Each syndrome with the exception of bipolar, can be

grouped into a sub factor, or in other words, a class of disorder, and is designed to narrow down higher order spectra. Sub factors are distinct yet sure inter related symptoms; which can be replicated for empirical research purposes. For eg, GAD, MDD and PTSD, all fall within the internalising, higher order dimension called ‘distress’, which is partly predicted by the big 5 personality traits model, ie in relation to neuroticism and extroversion (Brown & Barlow 2009). Likewise Obsessive Compulsive Disorder, panic disorders and certain phobias fall under the internalising spectrum and within the sub factor of fear. Internalising fear and distress disorders are often comorbid. However notwithstanding this, most correlations are found between syndromes within the same sub factor.

As the research extends newer higher order spectra are being identified such as extending the idea of externalising to disinhibited and antagonistic, as well as doing thought, detachment and somatic disorders as indecent categories in their own right. This structure is concerned primarily with latent liabilities relating to certain traits, such as neuroticism and negative emotions, supported by empirical clinical, neuro scientific and personality research. Adding phenomenological dimensions will lend itself to helping to improve the existing insights. Insights which it is hoped will extend upon the DSM’s current tendency to promote a narrow set of diagnostic criteria, confined by an unsustainable symptom threshold count.

The p factor is another proposed model; (See Conway et al 2019). The idea behind this diagnostic factor represents a continuum between so called normality and on-going possibilities of psychopathologic concern . It represents the most common genetic underpinning shared by every

clinical population, pertaining to comorbidities all over the spectrum. Having one general psychopathology, (perhaps as Jaspers 1912) had in mind, is a means of making the unfamiliar, familiar. Having one dimension goes behind the two and three dimensions of darker models, helping explain the underlying psychopathology. It has nonetheless a quantitative with its values associated with higher and lower denominations of impairment; thereby lacking the subjective validity of phenomenal experience. It may nonetheless helps to take research beyond our understanding of distinct, episodic categorisations. (See Caspi et al 2014).

Section 2(f): trans diagnosis and bipolar disorders

Comorbid anxiety in bipolar disorder (BD) is associated with greater illness severity, reduced treatment response, and greater impairment. Treating anxiety in the context of BD is crucial for improving illness course and outcomes. One alternative to the usual cognitive behavioural therapy treatments, is a transdiagnostic cognitive behavioral therapy, viewed as an adjunctive treatment to pharmacotherapy for BD and comorbid anxiety disorders. (Ellard et al 2017). Existing treatments do not adequately meet the need to address anxiety in the context of BD (Vazquez, Baldessarini, & Tondo, 2014). Although pharmacotherapy is the front-line treatment for BD, pharmacotherapy for the treatment of comorbid anxiety in BD faces significant challenges.

There is evidence to suggest that emotional regulation (Sloan et al., 2017), repetitive negative thinking or rumination (McEvoy et al., 2013; Wahl et al., 2019), psychotic experiences (van Os and Reininghaus, 2016) and experiential avoidance (Fernández-Rodríguez et al., 2018)

are all dynamical processes that may be implicated in a range of diagnostic presentations in BD and may be better served by being trans diagnostically examined from any number of specific dimensions, including a temporal one. It is fair to say that in view of the emerging evidence in the literature, the very concept of diagnostic specificity itself has been called into question in recent literature, as a proponent of a reliable diagnosis. (Dalgleish et al., 2020).

Section 3: A dimensional approach to mood disorders

Section 3(a): the healthcare setting, reliability and misdiagnosis

Primary health care (PHC) patients who are psychologically distressed often present with a combination of depressive, anxious and somatic symptoms (Lieb et al., 2007; Löwe et al., 2008; Hanel et al., 2009), making the job of diagnosing reliably extremely problematic. However, the predominant classifications of mental disorders, the International Classification of Diseases (ICD-11) (World Health Organization, 1992) and the Diagnostic and Statistical Manual of Mental Disorders (DSM 5) (American Psychiatric Association, 2013), do not provide a way to easily integrate various aspects of clinical presentations. To improve the assessment of common mental health disorders by Primary Health Care professionals in primary health care settings, classification systems need to provide a framework that better corresponds to clinical presentations that are becoming more common. (Zimmerman et al 2008) remind us that most cases of mis-diagnosis are in the primary care setting. In their study, (Ziebold et al 2019) provided evidence of the problem by using a dimensional approach to sensitise primary care workers to recognise the manifestations of multiple somatic symptoms, not easily explained by

existing physical pathology as an expression of an underlying latent phenomenon which would help to explain the common occurrence of depression, anxiety and other psycho somatic related conditions. The dimensional approach used in this study, helped take a first step towards the reduction of the treatment gap (Shidhaye et al., 2013). Consistent with previous studies, their findings suggested that depression, anxiety and somatic illness are different presentations of a common latent phenomenon. The study provided support for the ICD-11 PHC conceptualization of mood disturbance, especially anxiety disorder (AD) as central among patients who present multiple somatic symptoms

Section 3(b): a return first, to categorisation and standardisation

Despite the DSM's best efforts at standardisation however, unless some alternative and integrated attempt is made to encourage a realistically minded uniformed approach, relating specifically to the of usage of providing trusted descriptive and diagnostic observation and analysis, very little meaning can continue to be attributed to the quantitative and statistical side of mental illness, which appears primarily to be based on current ICD and DSM prescriptions and in many other ways, despite the opposite being aimed for, communication between psychiatrists is becoming increasingly difficult. Parnas et al, (2013) remind us that ontological and epistemological questions relating to the psychotic object should be at the fore-front of our concerns. A dimensional approach moreover to the study of psychopathology may require a return to the phenomenological subjective roots, which need not conflict with the approach taken by RDoC for eg in genetics and neurology. (Fernandez 2019)

Despite increasing evidence to the contrary, most current diagnostic systems for psychiatric disorders use signs and symptoms of illness to assign individuals to distinct, non overlapping categories. (Fernandez 2019). This approach is adopted in part so that the validity and utility of the criteria and categories could be tested and the approach sustained under growing pressure to evolve. In practice, explicit categorical criteria has been reported to improve reliability. (Stinchfield et al 2015). This long-standing debate howvwr largely reflects the fact that the evidence available on illness comes from assessment of high-level features: observed behaviors and self-report of problems. Diagnoses remain similar to those made 100 years ago because there are no accepted alternatives. (Potuzak et al 2012). Nonetheless, the validity of current nosological systems still remains under debate. (Fernandez 2019). The question is, does such an approach accurately reflect the complex underlying etiological and pathophysiologic structure of the illnesses observed in patients? Categorisation of psychiatric disorders appears to want to “carve nature at its joints.” However, it is not clear if there are “joints” between psychiatric disorders.

The Research Domain Criteria project was initiated in 2009 (http://www.nimh.nih.gov/research-funding/rdoc/index.shtml) to organize directed research efforts to advance our understanding of the etiology and underlying mechanisms of psychopathology through a dimensional approach, “agnostic with respect to contemporary diagnostic classifications,” using different units of analysis (eg, genes, cells, and aspects of behaviour).This long-standing debate largely reflects the fact that the evidence available on illness comes from assessment of high-level features: observed behaviours and self-report of problems. Diagnoses remain similar to those made 100 years ago

because there are no accepted alternatives, such as genetic or other biological markers, although overwhelming evidence suggests that such factors underlie illness risk and expression. Kraepelin's dichotomy of dementia praecox and manic-depressive illness has thus persisted because course and treatment outcomes can be roughly predicted from his distinctions and some patients fit within its structures.

Research into disorder dimensionality and comorbidity reports that large numbers of mental health disorders are manifestations of relatively few core underlying dimensions and rules. The introduction of the dimensional approach to diagnosis in support of current categorical limitations and assumptions, is based on its own assumption that the person being classified does not experience an easily standardised disorder, but differs characteristically, in the extent to which they possess certain mix of symptoms and properties, along a given disorder spectrum. (Hunsley & Lee, 2010). That is not to say, a person may have a very similar disorder and experience a different set of qualitative symptoms, and, or have a very different disorder and experience non-quantitatively similar symptoms. In other words, people can become affected similarly and or differently by a mix of different experiences, across a wide range of interdependent disorders.

Of one adopts a categorical approach, someone with a mental illness is assumed to be "different" from someone who does not have a mental illness, such as in brain mechanism. Yet the boundary of "have vs. does not have" for mental illness is unclear. Imagine two people who have the same difficulties because of a mood of boredom for eg, but one felt low for 14 days and the other for 13 days. This one-day difference could lead to different diagnoses or potentially no diagnosis for the second person.

However, this difference probably does not indicate a different underlying brain mechanism of mood. In addition, people who have an anxiety disorder have a higher chance of also having depression. This means that different categorical mental illnesses are not completely distinct as assumed, but rather share experiences and/or mechanisms underlying multiple illnesses. This shows that the categorical approach might not capture the true nature of mental illness. According to (Dalgleish et al 2020) comorbidity os now the rule and not the exception. There is something contentious and arbitrary in specifying a limit above which the presence of one or more symptoms will be deemed to constitute a disorder and below which it is assumed equally that a person is unaffected? Aligning the complex, multidimensional nature of mental illness with the structure of different classification systems remains a major challenge for psychiatry. (Clark et al 2017).

Numerous researchers have reported problems with the rigidity of the categorical approach and its basic assumptions. (Servaas et al 2021, Dalgleish et al 2020). In the past decades, it has been shown to be difficult to predict the course of psychiatric disorders, because the mechanisms underlying their development and recovery process remain poorly understood. These difficulties have been attributed to the fact that previous research has been mostly performed with a categorical label pointing the way, and on a single psychological or biological level for eg, typically using statically controlled measures with low ecological validity.

Section 3(c): dimensionality and mood as a continuum

In contrast to this view, affective mood disorders are now considered to be distributed across a continuum ranging for e.g., where bipolar

disorders is concerned, between pure mania to pure depression, rather than being discreetly organised as separate or even hierarchically structured disorders. Different dimensions and measures help explain may help us perceive of mental illness in an unbracketed sense, as a condition between our temperament and mood and some kind of neurological or genetic dysfunction or defect, and or psychosis. (Sulis 2021) relates to the idea that with mental illness being so complex, it is hard to believe it ever being understood, never mind being explained by one single model. Understanding such complexities, must involve knowledge of the dynamical relationship between mood and mental illness on more than one level. In the long run this must be helped by addressing mental health from a range of perspectives and gathering data, so that understanding the nature of this continuum may better inform the construction of taxonomies, in support of the current categorisation of behaviour. Both temperament and mental illness refer to patterns of behaviour that manifest over long time scales and they appear to share many underlying neuro regulatory system interactions. Valid research in this area is scarce and treatment options limited. The dimensional approach to diagnosis, however remains useful a means of providing an individual profile and potentially a more informed understanding of a patient’s actual and latent psychopathology

Section 3(e): phenomenology as an alternative perspective

In contrast to the traditional categorical model, the phenomenological approach, applying a range of measures, objectively and subjectively such as space and time can help progress our understanding of psychopathological matters, (Fuchs 2018, Fernandez 2016). A study of anomalous time is just one measure among many alternative

dimensions that looks to cut across traditional boundaries and symptom parameters in search of more reliable descriptions. Depression for e.g., can be examined phenomenally for more precise subjective features to characterise it, not according to a given mood state, but from the perspective of a conscious experience. (Fuchs & Pallagrosi 2018) consider that a combination of single symptom diagnosis, based on a subjective analysis of temporality for e.g., (Pritzaku & Fuchs 2022) and neuropsychological dysfunction based on objective analysis might be better served being integrated into a coherent whole conscious phenomenological experience to give a fuller and more accurate picture of a disorder. The basic structures examined in psychopathological research as with phenomenology include embodiment, inter subjectivity, self awareness and temporality (Lenzo & Gallagher 2020, Moskalewicz 2016, Vogeley & Kupke 2007)

From an experiential perspective on the other hand, the most easily observable symptoms are not necessarily the most essential for measuring reliability and validity and thus characteristic of a given disorder. (Fernandez 2019). They may according to DSM 5 be the best available descriptions for clinicians to recognise and work with, but this does not mean that they are reliable and valid. Notwithstanding the legitimate reasons for privileging fatigue or loss of energy or diminished interest in pleasure in cases of depression, the question of validity draws reference to the nature of the problem and its essence, that is to the essential characteristics that are present, without which it could not be the thing it is described as being.

Edmund Husserl’s eidetic phenomenology seeks a priori knowledge of essences and eidetic laws pertaining to conscious experience and its

objects. Husserl believes that such eidetic knowledge has a higher epistemic status than the inherently fallible empirical knowledge, but a closer reading of his work shows that even eidetic claims are subject to error and open to modification. See (Belt 2021). Nonetheless, careful consideration and analysis from a subjective perspective is not without its challenges, where the need for validity is concerned . According to Husserl, the empirical and eidetic methods differ not only in how knowledge is acquired but also in how it can be challenged and validated or verified. (See Belt 2021)

Diminished capacity to be attuned to the world as a whole, to have distinctive moods is perhaps not an essential feature of major depression, bipolar and mania. Other features denoting specific moods of hopelessness and grandiosity, such as guilt. irritability, and hedonistic tendencies are non essential because their manifestation is not necessary to cause depression. (Freeman 2014) informs us that Heidegger's account of attunement through mood is critical for a better ontological understanding of emotion.

According to this view our moods are not mere mental states, side effects or symptoms, that result from, arise out of, or are caused by our situation or context. Rather, moods are fundamental modes of existence that are disclosive of the way we find ourselves in the world. Mood is one of the basic modes through which we experience the world and through which the world is made present to us. Moreover, our moods denote what matters to us and help us understand their affective impact. Heidegger's insights in respect of mood can be extended beyond the narrow scope of his fundamental ontology (in Being and Time) in which

they were developed into a better understanding into better understanding psychopathological mood disorders.

Current psychiatric nosology, reflected in the Diagnostic and Statistical Manual for Mental Disorders, 5th edition (DSM-5, 2013) and the International Classification of Diseases, 11th edition (ICD-11, 2018) has been criticised for grouping disorders based on superficial similarity and for failing to represent actual commonalities among them (Watson, 2005; Andrews et al. 2009).

For example, affective and emotional disorders, are grouped together as a cluster of strongly related conditions, including depressive, bipolar and anxiety disorders as well as post-traumatic stress disorder (PTSD) and obsessive–compulsive dis- order (OCD) (Barlow, 1991; Watson, 2005; Goldberg 2009) is not a formal diagnostic class in DSM-5. These conditions were assigned to five separate classes despite strong similarities among them on a wide range of diagnostic validators (Goldberg et al. 2009b), with the possible exception of bipolar disorders (Goldberg et al. 2009a). In particular, the emotional disorders share several key risk factors, neural abnormalities and treatments. The key evidence for the emotional disorders cluster comes from factor-analytic research that sought to inform development of a quantitative nosology, which would classify disorders according to empirical commonalities and describe psychopathology dimensionally (Krueger & Markon, 2006; Lahey et al. 2008; Andrews et al. 2009).
In children, these studies have consistently supported two fundamental dimensional spectra: internalizing and externalizing (Achenbach, 1966; Achenbach & Rescorla, 2001; Lahey et al. 2004, 2008). See (Kotov et al 2014)

(Jennifer Jane Newson et al 2021) note that an assessment of mental illness typically relies on a disorder classification system that is considered to be at odds with the vast disorder comorbidity and symptom heterogeneity that exists within and across patients. They claim that the scale of misalignment between clinical symptom profiles and DSM-5 disorder labels demonstrates that DSM-5 disorder criteria does not separate individuals from random symptoms, and this has obvious implications for a complete mental health symptom profile of an individual's wellbeing. Greater emphasis on empirical and other dimensional data analysis would help with comorbidity detection.

There is subtle evidence of the dimensional approach to schizophrenia, in the chapter entitled "Schizophrenia Spectrum and Other Psychotic Disorders,". The DSM-5 chapter begins with a review of the domains of psychopathology that have historically been used for the categorical assessment of schizophrenia spectrum disorders. There are five such domains: hallucinations, delusions, disorganised thought (speech), disorganised or abnormal motor behaviour (including catatonia), and negative symptoms. Schizophrenia and bipolar disorder (BD) share elements that can sometimes be difficult to distinguish between. Both are characterised by psychosis, but in schizophrenia, auditory hallucinations are more common, whereas in BD, grandiosity and excitement are more prevalent. While paranoia can be present in both conditions, it is more systematic in schizophrenia. Moreover, negative symptoms and cognitive dysfunction are core psychopathologies of schizophrenia, in contrast to BD, in which mood lability and affective cycling dominate. These distinctions are crucial because early differential diagnosis is important for appropriate treatment. The

distinction between schizophrenia and bipolar illness, should be ideally linked to the considerations of the prototypical ‘whatness ’(which reside in the alterations of the structure of subjectivity, according to (Parnas 2011, 2012) rather than rely on a series of quantitative check-list scores. For example, clients with trauma and emotional dysregulation will have high emotional energy states for short periods of time (even fluctuating within the course of hours or a day). This is important to distinguish from a true bipolar illness, where clients have manic and irritable mood states that last days to weeks to even months in the case of major depression. Clients with emotional dysregulation can often identify a life-style and experiential triggering event such as the breakup of a relationship, criticism or failure at work or school, or family stress. (Hofmann et al 2012) offer a trans diagnostic model of mood and anxiety disorders. Their model posits that a triggering event, in conjunction with an existing diathesis, leads to negative or positive affect, depending on the person’s affective style.

Despite the obvious benefits of seeking neurobiological research data for early detection and hereditary purposes, and the simplicity and cost that the current diagnostic system and operational guidelines advocates and demonstrates, given the current global healthcare crisis, there is growing evidence that the current classification present or absent, all or nothing system, runs contrary to our understanding of the nature of mental health and in particular the subjective and experiential of phenomenal experience. This highlights the psychological limitations and challenges that individuals experience through the diagnostic process, as they fall inside or outside a given diagnostic symptom parameter; an experience which the healthcare system is unwittingly

stimulating, subsequently destabilising the system as a whole. (Kendler 2012)

Section 3(f): challenges to dimensional research

Due to the alarming rates of mis-diagnosis as much as anything else, research studies into mood disorder are beginning to explore the potential utility of dimensional approaches as discussed. (Cuthbert 2005, Brown & Barlow 2009). Irritability is one such example. It is a transdiagnostic symptom that has gathered a great deal of attention in the developmental psychopathology literature of late, due to the evident overlap between depression and mania. Partially in response to an alarming increase in rates of bipolar disorder diagnoses in young children (Blader and Carlson, 2007), one line of research has explored alternative classification for children who exhibit severe, chronic irritability. (Hawes et al 2019).

The DSM-IV section on Mood Disorders has been replaced in DSM-5 with separate sections for the Bipolar Disorders and the Depressive Disorders. The section on Bipolar Disorders is placed between the Psychotic Disorders and the Depressive Disorders in DSM-5, “in recognition of their place as a bridge between the two diagnostic classes in terms of symptomatology, family history and genetics”. (See Parker 2014). Due to the expansion of difficulties associated with the general class of depression and bipolar depression, three new depressive disorders are also included in DSM-5: (1) disruptive mood dysregulation disorder, (2) persistent depressive disorder, and (3) premenstrual dysphoric disorder. The number of bipolar disorders nonetheless remains unchanged; ie, bipolar I, bipolar II, and cyclothymic disorders,

as well as bipolar disorder due to medications, drugs, or a medical condition. Insignificantly, criteria for episodes of mania, hypomania, and major depression are generally unchanged from DSM-IV, with a few important exceptions.

More significantly, missing from DSM-5 is the DSM-IV entity of mood disorder “Not Otherwise Specified” (NOS), which has been replaced with (1) unspecified bipolar disorder and (2) unspecified depressive disorder; relating to people who present with an unclear pattern and who ultimately will have to be designated as one or the other.

The American Psychiatric Association (APA) prefers the terms unspecified or other specified for bipolar disorder to better reflect the uncertainty of the diagnoses. (The terms unspecified and other specified are also used for types of depressive disorders in the DSM-5).

Unspecified bipolar may be the diagnosis when a person's symptoms resemble the symptoms of bipolar disorder, but the clinician chooses not to specify the reason the criteria are not met for a specific bipolar disorder, such as in an emergency room where there is insufficient information to make a more specific diagnosis. Other specified bipolar disorder may be diagnosed when a person displays specific symptoms of bipolar (such as manic and/or depressive episodes), but the full criteria for those symptoms aren't met.

The DSM IV diagnostic classification of mood disorders had two recognisable shortcomings: (1) an underdiagnosis of bipolar disorders and (2) a large proportion of treated patients had to be allocated to the vague NOS groups ‘not otherwise specified’. Several new subthreshold

groups of depression, bipolar disorders and mixed states have now become operationally defined in DSM-5. In addition, hypomanic and manic episodes occurring during antidepressant treatments are, under certain conditions, accepted as criteria for bipolar disorders. Moreover, the diagnosis of bipolarity now requires, as entry criterion A, not only the presence of elated or irritable mood but also the association of these symptoms with increased energy/activity. This restriction will nevertheless effect and change the diagnoses of quite a number of patients from DSM-IV bipolar I and II disorders to sub diagnostic bipolar syndromes. Nonetheless, on the whole DSM-5 is a step in the right direction, attempting to specify more sub diagnostics categories with an improved dimensional approach to severity and psychosis. (Angst 2013)

DSM-5 includes multiple specifiers to describe the Bipolar and Depressive Disorders, as part of a mixed categorical-dimensional approach. The specifiers are meant “to define a more homogeneous subgrouping of individuals with the disorder who share certain characteristics … and to convey information that is relevant to the management of the individual's disorder”. The reality is the DSM-5 does not represent such a paradigm shift, despite significant pressure to do so. The Psychotic Disorders Workgroup found that the DSM-IV criteria for the psychotic disorders do not accurately capture the considerable variability of symptom profile, response to treatment, and most importantly, social function and outcome. (Heckets et al 2013).

The specifiers are intended to be used to describe the course of a person's disorder and should not affect the frequency of the underlying diagnosis. The specifier of “with anxious distress” is the only entirely new one. It was added to account for the high prevalence of symptoms of

anxiety in both manic and depressed states and because “a substantial body of research conducted over the past two decades points to the importance of anxiety as relevant to prognosis and treatment decision-making” in bipolar and depressive disorders. The addition of this specifier should encourage the identification of anxiety in people who have a bipolar or depressive disorder, which should lead to improved management of suicide risk, as anxiety is a risk factor for suicide. Conversely, a lack of recognition of anxiety in the medical record or treatment plan could have implications for malpractice liability in cases of attempted or completed suicide. The DSM-5 introduced the anxious distress specifier in recognition of the significance of anxiety in patients who are depressed. The studies have supported the validity of the specifier in patients with major depressive disorder (MDD). Zimmerman et al, (2020) confirm that the results of our study indicate that anxious distress is common in patients with bipolar depression too and thus supports the validity of the DSM-5 anxious distress specifier

The DSM-IV entity of a mixed episode of bipolar disorder has been replaced with the specifier “with mixed features”, which can be applied to bipolar I, bipolar II, major depressive, and persistent depressive disorders. Thus, a person with hypomania or mania who shows some symptoms of depression and a person with depression who shows some symptoms consistent with hypomania or mania should be designated as “with mixed features.” Although the mixed-features specifier will “better account for the highly prevalent subsyndromal presentations” of both manic and depressed states, its addition does not solve the problems of the overlap between unipolar and bipolar depression or the middle zone depicting the boundary between bipolar disorder and schizoaffective disorder. As a result, debate on the applicability of this specifier to a

particular person could be vigorous. The DSM-5 criteria for the specifier of mixed features have also been criticised for including euphoria and excluding agitation and irritability, thus moving away from Kraepelin's original concept of mixed depression as a fairly common clinical entity. (Mcintyre et al 2018).

Diagnostic and therapeutic challenges specific to MDD with mixed characteristics exist. In contrast to BD-I and BD-II, the diagnostic phenotype of MDD had a poor level of inter-rater reliability in the DSM-5 field trials. This finding suggests that the more depression-prone a person is, the more probable it is that they may receive an incorrect diagnosis and/or unsuitable treatment. (Freedman et al 2013). Additionally, the International Mood Disorders Collaborative Project's findings demonstrated that mixed features are frequently seen in adults with both MDD and BD: roughly one-third of those with BD-I or BD-II diagnoses and about one-quarter of those with MDD met the DSM-5 criteria for mixed features. (Mcintyre et al 2015). As a result, many individuals with mixed traits run the risk of receiving an incorrect diagnosis, a delayed diagnosis, or the wrong kind of treatment.

The most recent revision of DSM IV-TR is DSM-5, and the mixed-features specifier of major depressive disorder (MDD) for mixed depression in DSM-5 is currently the subject of intense debate. A major depressive episode and modified (hypo)manic criteria that were based on bipolar disorder's criterion B make up this mixed-features specifier. Although the former included heightened and expansive mood and the latter omitted distractibility and psychomotor agitation, the (hypo) manic criteria of this specifier and bipolar illness are extremely comparable to one another (in criteria A of bipolar disorder). Due to these modifications,

the paradigm for mood disorder has changed from being categorical to being dimensional or spectrum-based. However, some researchers continue to criticise the MDD mixed features specifier. They believe that the DSM-5 criteria lack a strong scientific foundation and fail to recognise the majority of potential mixed depressive states. These DSM-5 criteria have been referred to as "a farewell to mixed depression" or "the miracle that never happened" by certain authors. (Koukopoulos & Sani 2014)

Part 3: Temporality

Section 1: temporality and dynamical cognition

Temporality is a suitable dimension for studying mood disorders. Any and every situation is structured by time, albeit subjectively, and thus as long as man endures must itself endure over time, in order to be considered truly temporal; and in doing, is essentially dynamical in nature. Thus, temporal extendedness is a prerequisite for a cognitive process that asserts to have 4E features (Vogel et al 2017). Any cognitive system needs time to integrate the vast amount of perceptual data with prior knowledge and produce a useful output (Pöppel, 1997). This apparent triviality is actually a biological and physical characteristic of the brain, albeit a constraining and learning one. Numerous intricate neurophysiological processes are required for information to travel from the retina, for example, to the visual brain (Varela, 1999). Molecules must alter their structural arrangements; action potentials must be produced; transmitters must be released, cross the synaptic cleft, and bind to receptors on the postsynaptic membrane of an additional neuron, from which new action potentials emerge; etc. These biochemical

activities are related to cognitive processes, which are localizable facts inside the neural system that also follow temporal orders (Varela, 1999; Vogeley & Kupke, 2007). It follows that the duration of these processes affects the temporal resolution of perception.

Because different brain processes take different amounts of time, distinct perceptual modalities also have different temporal resolutions (Pöppel, 1997). Despite these perceptual constraints, our experiences seem to occur continuously to us (Husserl, 1928). Two observations seem obvious: I time progresses toward the future and comprises a passage; and (ii) time is ordered along events that compose a structure, however it is debatable whether the flow of awareness is actually continuous or merely appears to be so (e.g., Dainton, 2002; White, 2018). (Kupke, 2009; Vogel et al., 2020).

The existence of "objective time," that is, whether it is biological, physical, or ontological in origin, is up for question, despite the appearance that these observations are objective. The study's description of temporal situatedness focuses primarily on temporality as a subjective and cognitive experience. Although there may be a complex relationship between the objective and subjective aspects of our experiences (Zahavi, 2018), the idea of dynamic change is perceived as something that is going into and toward the future. It seems hard to stop time from moving forward and turn experiences into something that is genuinely timeless. Despite this, we perceive our stream of perceptions and ideas as being in a constant state of "pure transition" (Kupke & Vogeley, 2009; Kupke, 2020; Fuchs 2018); even states that are said to be timeless share at least one characteristic with all other states: they transform into other states.

If we use the word "situated cognition" to describe cognitive states and use the ongoing experience principle, we come to the concept of the "dynamic process." The temporal characteristics of situatedness are best described by the terms "dynamic" or "transitional process." Processes by definition consist of action steps, and in the case of the situated cognitive process, the cogniser engages in these stages as they occur. A shift from one stage to the next is a necessary part of the cognizing process in order to produce an insight or an idea. Any such system will alter as a result of the dynamic mobility inside the current process. Furthermore, the ensuing cognitive state is not the only thing that might alter. The technique itself may be changed in order to better handle the situation depending on the available affordances. As a result, we see the dynamic in at least two different transitional states that allow for constant modification. One is the change in the time microlayer. By the appearance of a new perception or impression, previous perceptions and impressions are replaced. Integrative brain systems take in shifting inputs and process them. Action potentials and brain oscillations generate similar novel events on a neurobiological level. The entire microlayer appears to mimic time's general anisotropy (Vogel et al., 2020). The macrolayer allows for observation of the second transition. When performing a piece of music, it is necessary to play the notes in order and the associated musical instrument manipulations in order. A forward-directed movement that modifies its substance within one situational context constitutes the transition from one scenario to the next (e.g., note after note within the piece of music). As a result, within the larger biographical narrative, situations are made up of shifting steps that are then open to change themselves.

Regarding how time is structured, we see that due to the dynamic flow of time, events inevitably occur one after the other. This is relevant to the current condition of affairs and hence unavoidably pertains to their respective temporal perspectives. Only when these horizons are placed in a logical sequence after one another can a situation be appropriately bounded by earlier and later horizons. Our experiences are typically organised along this time sequence of clearly defined important occurrences. It is also remarkable that this framework extends into the future through planning, not only past events.

The structure is visible on both the microlayer and the macrolayer of time, just like with the passage of time (Kupke, 2009; Vogel et al., 2020). Husserl's analysis of temporal awareness (Husserl, 1928) looks at how the processes of retention, primal impression ("Urimpression"), and protention continuously shape our consciousness for the microlayer. Impressions describe the percept as appearing to/in awareness at the boundary between retention and protention, where retention refers to the past impressions and protention to the impressions that will come. Together, these structural elements provide the impression of a lasting, continuous experience (Husserl, 1928), and in this sense they be measured according to the deviations in temporal perception, as they relate to mood disorder for evidence of characteristic features and structural composition

Section 2(a): phenomenology and the temporal experience

Temporality has long been recognised as a crucial aspect of human existence and experience as the experience of and in time (e.g., Kant, 1781/Husserl, 1928). But all too frequently, time is spatialized (e.g., "time

windows," "time distance," "time lines," "time timetables," etc.), which reduces it to moments and units like seconds or dates (Bergson, 1920). Such actions disregard the crucial part that time plays in our experiences. Time is always with us as we pursue pursuits and perform acts. We exercise control over our circumstances and seek to affect our (near or distant) future while acting in the present (Vogel et al., 2020). We achieve this by drawing on our prior experiences and education. Because of this, our present cannot ever be limited to a "now" in the sense of an impersonal moment in time (Heidegger, 1953; Ricoeur, 1980). The present, which encompasses a number of temporal references at once, is a necessary component of our continuous story because it is a lengthy period of time. Regardless of the content of our activities, time and temporality give them meaning and purpose. As a result, each cognitive situation is both geographically and temporally enlarged. It is a historically persistent situated cognition rather than just a geographically enlarged situs cogitans.

Mental illness not only interferes with the continuity of normal daily life but can also be accompanied by a change in the subjective experience of time. (Fuchs 2007). The phenomenological analysis of lived time, underpinned by Bergson, Husserl’s, Heidegger, Merleau Ponty and others, and carried out by psychopathologists such as Jaspers, Minkowski, Binswanger, Telemann and others, can testify to this, by attempting to develop a systematic framework for the examination of conscious experience in mental disorders, giving specific attention to the problem of distorted lived experiences of time. Any impairment of lived time should not be considered as simply one symptom among others, albeit it is basic feature. On the contrary, it expresses a fundamentally altered mode of existence which cannot be reduced to brain

dysfunctions or other more conspicuous behavioural signs or symptoms. A lack of attention to the subjectivity of the affected person leads to a flawed, if not incomplete, psychopathological understanding. Continental philosophy in Genaro and phenomenology in particular, has explored the concept of time as a basic structure of the human self. (Fuchs 2019, Fuchs & Pallagrosi 2018). According to its perspective, human beings are time producing organisms, and their awareness of being is imbued with the sense of a lived duration of experience. In the phenomenological model, in fact, the flow of consciousness proceeds, on a pre-reflective, implicit and lived level of experience, (Fuchs, Husserl), each one of which possesses a specific sense of mineness. In other words, every experience that appears in the stream of consciousness belongs to the experiencing subject in a unique way. This sense of mineness, which is considered as the essential feature of the minimal or experiential self [8], entails the intrinsic capacity of experiencing the block of duration, that is, the continuity bridging discrete experiences. Without it, we would have an infinite sequence of single moments, which means that there would not be any experience at all; for“every experience is a temporally extended lived presence. (Zahavi 2010).

Section 2(b): a brief history of the phenomenology, temporality and early psychiatry

Minkowski and lived time

Eugène Minkowski’s concept of (‘Lived Time’ 1935), (see Ledermann 1972, for a full relationship to phenomenological and psychopathological studies), articulates a phenomenology of time that is as inspired by the

philosophical writings of Henri Bergson and Edmund Husserl as it is by the psychiatric descriptions of Eugen Bleuler. After providing a phenomenological description of the experience of time in normal life, Minkowski considers a number of mental illnesses, including schizophrenia, manic depression, and dementia, and he attempts to show that these pathological cases can be characterised in terms of a distortion of lived time. Minkowski looked to discover the a priori character of the normal world, in which people live. Accessing the patient's subjective world can be found empirically in the experience of time. For Husserl, (1991), time is temporally constituted by consciousness by means of intentionality "the purely intellectual constitution of temporal modes or the constitution of objects in subjectivity".

Minkowski's basic hypothesis can be related to bipolar as a basic temporal disorder. Mania like melancholia has its roots in the temporal structures of human experience, and specifically in an impairment in the way that time unfolds, i.e., in terms of the way our temporal experiences are structured into a past, present, and future. (See Minkowski, 1933). A person in a state of manic excitement for eg, lives only in the now; there is no future for them beyond this event horizon; any interactions with the environment are restricted to the here and now. While a person suffering with depression remains immersed in and thus consequently becomes a prisoner of his past. Minkowski realized that psychopathological disorders were not an overlap of symptoms, but the deep expression of a modification of the entire existence of the subject. He developed a psychopathology based on ontology rather than anthropology of mental illness (Abreu & Silva, 2004; Pélicier, 1995). In depressive disorders, the fundamental phenomenon that organizes existence is related to

temporality and the symptoms present in melancholic depression must be understood based on that experience. The melancholic do not experience time ‘as propulsive energy’, but feel it as a flow of temporal current. Thus, for these patients, the future is perceived as blocked; their attention is directed to the past and the present feels stagnant. Like the manic experience, there is no way behind the present feeling. (See Cardinalli, 2012). Thus the core of the work of Minkowski (1933/1995), in which the experience of fluid, continuous and interwoven time is evident, is essential for the existence of our health and wellbeing. That is to say, when our temporal fluidity is inhibited in any way, our temporal becoming ruptures and any propulsion for the future we might have otherwise had dissolves, creating an existential rigidity that blocks our future possibilities, as all our energy is focused on the inevitable episode, we are temporarily and temporally fixed to. The understanding of depression by means of stiffness of fluidity of becoming goes beyond the causal origin of illness, seeking to understand the meaning of the lived experience of the patient. Minkowski (1933/1995) prioritized clinical experience and patient interaction, understanding implied depressive disorder with fluidity and the movement of becoming.

In contrast to the reductionist tendency to view a phenomena objectively Minkowski approached the human being, not merely via description, describing the experienced phenomenon instead related to the experience in terms of the temporal structure that organises within a dynamic context. (Pereira, 2000). Understanding the pathology as pathos is to reaffirm the “original disposition of the subject which is the basis of humanity itself. Thus, pathos comprehends the entire human dimension, permeating the whole universe of the being” (Martins, 1999, p.66). Pathology in this sense, is not what science defines as a disease,

immersed in a negative connotation and associated with the concept of healing, but rather it corresponds to a disposition and a movement of fundamental phenomenon that comprises the existence of man and constitutes a new form of existential being (Martins, 1999; Pereira, 2000).

According to Minkowski, mental diseases are not isolated disorders of the brain, but abnormal modes of human’s being-in-the-world. Besides, I am not a brain, though my brain is an interface between me and world. Schizophrenia patients do not suffer from the loss of high mental abilities, but have excessive mental abilities. It was Henry Bergson and Max Scheler who first gave phenomenological thinking to Minkowski. When he was coping with melancholic patients, he found the distortion of patient’s sense of time. It was this discovery that showed him the relevance of phenomenology of time and that led him to his most influential book ‘Lived Time’. Minkowski’s phenomenology is a science of studying the essential phenomena of mental diseases. It is very close to Karl Jaspers' phenomenology, but a little far from Husserl's, whose work he didn’t quote that often. Husserl's phenomenology focuses on the essential phenomena (possibility or construction of individual conscious experiences), while Minkowski's phenomenology focused instead on the empirical phenomena, especially phenomena of mental diseases. Jaspers has developed his phenomenological view of description in the first chapter of his General Psychopathology. To Minkowski however, Jaspers ’phenomenological focus on description was not enough; what was needed instead was a more essential analysis to grasp the basic underlying feature.

Jaspers, description and psychopathology

Many consider the German philosopher and psychiatrist Karl Jaspers (1883–1969) to be the originator of the phenomenological approach to psychopathology. Karl Jaspers began to signal his intentions by 1912. He had written a brief piece detailing how Husserl's phenomenology could benefit psychiatry. The relevance of phenomenological resources to Jaspers becomes clear when we take into account some of the key experiential categories that are affected in various psychopathological conditions, such as the structure of temporal and spatial experience, the distinction between self and non-self, the experience of one's own body, and the unity and identity of self. Jaspers provided phenomenological explanations of unusual subjective perceptions. But he acknowledged that "psychological phenomena" or "psychic events" must also be investigated utilising techniques for behavioural description and performance evaluation, as well as taken into account in their causal link with neuronal structures and functions. However, as he pointed out, psychiatrists are only interested in brain processes when they are correlated with or may even be the cause of events that happen on the conscious level. The association between brain states and experiences that can be used to identify mental episodes is ultimately the only reason these states have the significance they do

According to Jaspers' methods of inquiry, recognising, categorising, and treating illness begins with a thorough diagnosis (Huline-Dickens 2013. How can we gather trustworthy knowledge about psychopathological occurrences and an understanding of the connections involved, which, when comprehension breaks off, can constitute an indication of illness? This is the first requirement for making a diagnosis. Jaspers takes into

account the value of accurate description in this case. He preferred descriptive psychopathology as a means of gathering data and outlining the current course and prior development of a mental disease, which served as the prerequisite for assigning it a diagnosis. Only facts shared by the patient or a relative and what the examiner observes are used in descriptive psychopathology. The descriptive approach differs from other approaches such as the interpretative method used in dynamic psychiatry because of its asceticism. Because of this, descriptive psychopathology has higher inter-rater reliability than other approaches. As a psychiatric approach, descriptive psychopathology dates back to Karl Jaspers' early writings, which are collected in his book (General Psychopathology 1913).

In today's study and practice, the terms "description" and "descriptive psychopathology" are used with very distinct meanings. The description provided by the Oxford Textbook of Psychiatry is fairly accurate. Phenomenology is a recommended way for learning about psychopathology (Giorgio & Giorgio 2017). According to its description, it is "an objective depiction of anomalous mental experiences in a way that avoids any preconceived notions. Clinical data must be consistently categorised and collected in a clear, objective manner. The introduction of a methodological arsenal in the field of psychopathology by Jaspers' General Psychopathology, published nearly a century earlier (1913), is regarded as "a landmark in the evolution of clinical psychiatry." Jaspers saw phenomenology as the descriptive psychology of things present to consciousness, as demonstrated by Husserl's early work (1901). He believed that all things should be understood by direct perception and intuition, free from any preconceptions, in their true, unadulterated selves. Jaspers also adopted the distinction between the

nomothetic natural sciences and the ideographic human sciences proposed by the neo-Kantian philosopher Wilhelm Windelband (1848–1915) in light of the philosophy of his time. Following in this tradition, Wilhelm Dilthey (1833–1911) made a clear distinction between the approaches that applied to these two aspects of existence, adage he coined in 1894: "We explain nature, but we understand psychological life." Jaspers distinguished phenomenology as a cross-sectional mode of inquiry from his books on genetic knowledge, which he considered as a longitudinal approach, by defining it as the intuitive reproduction, static comprehension of "the individual facts of psychic life existing in the consciousness." Understanding genetics entails empathically grasping and virtually experiencing the sufferer. By using this hermeneutic technique, the clinician can learn how a mental phenomenon meaningfully develops from another mental phenomenon. Hermeneutics, in Spiegelberg's words, is an attempt to understand any phenomenon meaningfully. (Suddick et al 2020), there is no way to scientifically demonstrate whether the insight the examiner receives from the patient's psychic life actually corresponds with the patient's actual meaningful experience during the examination. Jaspers introduced the examiner's immediate, intuitive experience of the evidence as a standard for validity because of this (quote)

Empathetic grasping

The methodological approach used by Jaspers has, in part, been criticised over time. Emil Kraepelin for e.g., had already questioned understanding as a means of learning. Although essential in interpersonal interactions, he thought that empathic grasping was a highly inaccurate research technique that may result in the most severe

form of self-deception. Kraepelin believed that the intuition of evidence as a standard for validity was suspect "since [there is] no yardstick by which to judge the reliability of this sensation of certainty"55. On similar grounds, later writers have challenged genetic understanding. It is presumably easier to distinguish between verbal hallucinations as "inner" speech and audible "external" speech when one has a static grasp of isolated experiences that are described as pathologically altered "forms" of experience. This is one of the factors contributing to the ongoing popularity of distinguishing between pathoplastic content that is mainly comprehensible and unrelated to sickness and a qualitatively altered form as an indicator of illness. A pathological process and the transformation of a natural development into a pathological process, which von Baeyer referred to as "the Jaspers theorem," have both drawn criticism. Jaspers explained a process by which deep bonds can sever, leading to "incurable changes un the psychological life incompatible with the personality as known to date." An interpretive account of diseased experiences, such as delusions and hallucinations, was hindered by the apodictic contrast between an understandable, healthy development and an incomprehensible, causally explainable pathological process. Jaspers categorically rejected both Robert Gaupp and Ernst Kretschmer's theory that the underlying paranoid delusions or sensitive delusions of reference were developments understandable from a person's personality, biography, and traumatic experiences, as well as Eugen Bleuler's psychoanalytically oriented empathic penetration into the symptoms of schizophrenia. (Schmidt-Degenhard 1998). Jaspers' adoption of Husserl's phenomenology resulted in an epistemological issue that received little attention at the time, maybe due to hi,m distinhusing between nomothetic and ideographic practices. The first pre requisite at

arriving at a diagnosis stems from knowledge (Hafner 2015). Jaspers utilised phenomenology to acquire insight into another person's consciousness, but Husserl intended it as a way of reflecting upon things occurring in one's own consciousness. Intersubjective perception is thus brought up. Jaspers preferred an indirect approach, such as the sharing of another person's mental phenomena through empathy and personal experience. Contrarily, Max Scheler, a philosopher who expanded Husserl's phenomenological approach to psychology, held that psychic insight into another person can be spontaneously attained. There is no need for cognitive thought because humans are able to empathise with one another because of our shared existence and humanity. Because of this, a psychiatric interviewer frequently has the ability to comprehend both the experiences and behaviours of a mentally ill individual as well as those that he has not personally encountered. Hafner (2015)

Binswanger, existence and temporality

A young Michel Foucault advised against categorization when he said in 1954 that the work of Swiss psychologist Ludwig Binswanger (1881–1966) in the existential phenomenological tradition was a challenge to contemporary disciplinary divisions: he urged against bridging according to rigid and narrow categosrise

"Ignoring the underlying meaning of the project is to reject such an inquiry at first sight because it is neither philosophy nor psychology, because one cannot characterise it as science or speculation, since it neither appears like positive knowledge nor offers the content of a priori cognition (Foucault, 1994: p.32)

In contrast to psychiatric classification systems, the phenomenological tradition in psychopathology, which is based on Husserl's and Heidegger's philosophy, offers hints for a comprehension of man's existence (Pessotti, 2006; Schneider, 2009). It highlights how the phenomena manifests and what it means to the person experiencing it, giving insight into the many illnesses and their potential causes. This strategy has a major critical potential and is distinct from the prevalent norms of health and illness, normal and pathological.

Husserl's philosophical phenomenology, in especially its descriptive aspect, is the foundation of the majority of his phenomenological works. He then returns to Husserl's phenomenology, which is no longer descriptive but a phenomenology of subjectivity, the transcendental Ego in Husserl, through the work of Heidegger, particularly after reading "Being and Time," in search of the constitution of the various forms of illnesses, particularly melancholia, mania, and delirium (Pita & Moreira, 2013; Tatossian, 1979/2006).

in 1960 and analyses the various melancholy forms through temporality. Binswanger (1960/2005) recognises that when talking about lived time, the past, present, and future are temporal domains that include retention, presentation, and protention, concepts that Husserl employed and acknowledged as "constitutive structural moments of the temporal objects". Binswanger (1960/2005) uses the example of the speaker, as understood by Szilasi in a book on Husserl's phenomenology, to explain these fundamental moments. Protention permits the conversation to happen while a speaker speaks, or at the moment of presentation, without which the phrase cannot be finished. Similar to this, retentions must be present throughout the presentation because they are the ones

that let the speaker know what will be spoken. These aspects that make up time can be seen to be interwoven in a healthy, functioning person. The aim must be to reveal the insufficient forms of these three domains and their interaction in order to comprehend melancholia. According to Binswanger (1960/2005), the canonical modes of melancholy, retrospection and prospection are intertwined into the melancholic temporality. Retention and protention, which combine the past and the future, are connected by a flawed reorganisation on structure, that results from the relaxation of the link between the three structural domains of time. That is, presentation appears to become loose and empty and renders present-day experience empty when the intended threads connecting various domains loosen.

Binswanger claimed that metaphors of rising and falling also expressed "the wider and deeper rhythms of normal and pathologically manic and depressive "disattunement" which included disappointment as well as depression. (Binswanger, 1994b). Binswanger raised the study of human existence to the level of an anthropological science, or what he called an existentia anthropology. According to him, anthropology must examine "the person" from the perspective of a specific notion of the person, just as the natural sciences explore "nature" in accordance with a certain thought of nature and biology studies "life" under a certain idea of life. A pre-scientific being was converted into something scientific through this directing, strengthening, and restraint of cognition through such an idea (Binswanger, 1992). The idea guiding the analysis of the human, in his words, could not be a synthesis of several conceptions because then the scientific understanding of the human being would emerge as a sort of bodily-emotional-intellectual conglomerate. He believed that this disparate collection of approaches could never

produce a thorough, all-encompassing analysis of the human. His solution was as follows: We must select a concept to serve as our leader that is "pre-ordered" with respect to those ideas of body, mind, and emotions, insofar as it already has the potential for those ideas. This notion of existentiality as the coherence of the ontological systems that make up existence is known as the (fundamental-mental-ontological) concept. a branch of anthropology known as existential anthropology that studies and comprehends people from this perspective. (Binswanger, 1992)

Tellenbach and etiology

Tellenbach frequently draws upon Husserl and Heidegger's philosophy throughout his writing, using them as significant sources to illuminate his clinical practice (Dastur, 2005). Tellenbach released "Melancholia," his most important piece, in 1961. The objective was to undertake research that prioritised the origins of the melancholic issue from a psychopathology endogenous approach (Ambrosini, Stanghellini, & Langer, 2011; Dorr, 1996). The genesis of mental diseases was still a concern at the time, and psychiatry made a distinction between three causative fields to try to address it: somatogenic, psychogenic, and endogenous causes (Tellenbach, 1969/1999). The first two are associated with somatic and psychological elements, whereas the third is associated with the endon changes' etiological field, which is a term that is unclear in psychiatry (Pereira, 1999).

One of the major debates in psychopathology is whether there is a predisposition to mental illness. According to Tellenbach (1969/1999), this disposition is neither solely a reflection of a person's particular

existence nor is it immediately tied to their somatic and biological makeup. His research aims to comprehend the genesis and evolution of endogenous processes, particularly with reference to melancholy illnesses. When treating 119 patients who had been in a melancholy mood at the University of Heidelberg's mental clinic, Tellenbach developed the idea of ‘Typus melancholicus.’ His research helped to pinpoint the primary personality characteristics that define a particular way of being and are associated with the potential onset of melancholy (Ambrosini et al., 2011; Von Gebsattel, 1976). The claim made by Tellenbach was not to create a type based on the nosological and classification principles of conventional psychiatry; rather, his contribution stems from phenomenological thought, which places more importance on movement and experience than on situational cause-and-effect relationships. Only endon offers constant, key characteristics to comprehend the pathophysiology of melancholia which is it able to describe the melancholic type. According to Tatossian (1979), endon is the movement of human life, the fundamental form of vital succession, which is constantly changing and is characterised by its constant becoming. Rhythmic changes in human life for e.g. include shifts in sleep and wakefulness, the periodicity of the female cycle, and regular emergency situations. Journal of Psychology, Campinas, 33(1), 107-116, January-March 2016. Tellenbach (1969/1999) doesn't offer a typological argument for static conceptions; Instead, he bases his idea of type on his direct clinical experience with people who identified as melancholics and not via the research of features and their systematic structure, but rather by experience in interacting with melancholics, have we discovered the fundamental characteristics of the melancholic type. While some modes of being are unquestionably predesigned, the essential features we learn—which are continuously becoming true—are

of a structural nature (Tellenbach, 1969/1999, p.172). According to Tellenbach (1969/1999), "orderliness" is the key attribute of the melancholic type and is its most noticeable trait. At this stage, controlled limiting of their interpersonal contacts causes an intense rigidity of the gloomy type's behaviour. These traits have an obsessive connotation because they emphasise commitment to order, strict standards, a sense of duty and completeness, and a rejection of any signs of improvisation. The Western economic world demands and values many of these qualities (Leite & Moreira, 2009). The gloomy type differs in that they are less flexible when executing tasks since for them, the activity itself and not the action is what matters. The cultural value of people with this personality type is usually high, but they unjustly suffer because of it. Along with these traits, a strong desire to please others and a strong sense of shame in light of life's events are also noticeable.

The need for clearly defined boundaries is the melancholic type's second standout trait. This requirement has a major impact on their interpersonal interactions, which can be viewed from either the perspective of being for others or oneself (Tellenbach, 1969/1999). In the first scenario, the gloomy personality cannot continue to be in debt or to be in possession of someone else, preferring to live an almost symbiotic lifestyle by having little aptitude for isolation, Estudos de Psicologia, Campinas, 33(1), 107-116, January-March 2016. Their core sense of self-consciousness stems from their existence and the being for others, especially when it comes to the situatedness of a close friend. There may be serious issues because of the existential emptiness that might result in a gravitational field of sorrow when one does not fully fulfil the other, whether by ageing, illness, weddings, rejection, departure etc. (Tatossian, 1975; Tellenbach, 1969/ 1999). The second situation characterising melancholy is distinguished by a certain attitude of

scrupulosity and clearly defined boundaries, in regard to one ‘s connection with oneself. These individuals possess a great moral consciousness, which puts morality above practically everything. When guilt is not dealt with, it is attempted to be avoided as much as possible by imposing an expiatory activity on oneself (Tellenbach, 1969/1999). It is possible for the performance of an activity to fall short of the high expectations required, which indicates a well-known intolerance toward oneself

Psychopathologists studying the experience of time more recently have also reported that major depressive episodes can often be marked by a disturbance on our sense of becoming, resulting in a blocked future, (Straus, 1928; von Gebsattel, 1954a,b; Fuchs, 2013; Stanghellini et al., 2017; Vogel et al., 2018). Additionally, this conceptual phenomena has been connected to symptoms like lack of interest, diminished affective response, depression, emotionlessness, and psychomotor slowness (Stanghellini et al., 2017; Vogel et al., 2018), all of which appear to have a temporal foundation. Major depressive episode patients are reported to have lost their vital elan, or push for the future, in a physiologically and psychological and grounded sense, (Minkowski 1933), making it difficult for them to develop enduring and extended relationships with others and to seek and set realistic future goals (Straus, 1928). Patients lose the ability to take action in the present to alter their surroundings and, in turn, their future. (quote). The depressive state might be thought of as a seemingly endless situation if these observations are expressed in terms of an ongoing situated cognition, one day simply turns into another. The transition to a new circumstance no longer actualizes itself, as in the case of Minkowski’s schizophrenic patient, described earlier, irrespective of the evidence, due to, in a psychological sense. The same

continuing situation is still being produced by the cognitive system, despite what else is going on around simultaneously, however, it will have still lost some of its essential temporal dynamical vitality. It has been hypothesised that the combination between this shift in the timing of the circumstance and the social and interpersonal embeddedness contributes significantly to the suffering of patients by producing perceptions of time regressing or even time standing still. (Fuchs, 2013)

Section 2(c): bridging the temporal gap

The riddles of time have frequently been long perceived as riddles of identity, in both a pathological and non pathological sense. In essence, we are basically, temporally subjective experiencing entities. (Wehrle 2020, Fuchs 2007). Time is not just a constant in our lives; it also plays a crucial role in how we perceive ourselves and the outside world. Time is basically an inward-looking phenomenon, as Augustine first pointed out. (Zahavi & Parnas 1998).

It has been widely reported that bipolar for e.g., as well as other mental health disorders like schizophrenia, which affect other aspects of daily life like cognitive functioning and social interactions, share the same or a similar structure of temporal experience, i.e. as an identifiable, core psychological feature (see Martin et al. 2019, Fuchs 2019, 2017, Gallagher & Lenzo 2020). Time in this sense is a fundamental ontological building block of being in the world (Heidegger), shaping our sense of self and meaning. Time is a structure of everything intentional (passive temporal synthesis) and conscious (Husserl 1992), and the way our perception interacts with our experiences, helps to stabilise our cognitive and social interactions. Thus, this temporal structure can be

preconceived, tacit, and implicit in nature as well as pre-given (Fuchs 2005, 2017). It can and does alter our perception of what is objectively real if it is twisted.

Why do contemporary psychiatric nosologies, such as ‘The Diagnostic Statistical Manual’, and ‘The International Classification of Diseases ’ underemphasize temporal experience since it is so crucial to our daily lives, whether they are normal or abnormal? Simply put, one solution is an excessive reliance on natural or scientific technique. (quote). It is easier to measure and explain how we perceive time using modern scientific methods that use a more objective notion of duration, but this objectification also has the tendency to minimise temporal experience and its subjective aspect (quote). Thus, it should be obvious to anyone who is familiar with the phenomenological tradition that any attempt to measure time perception through the quantification of clock time encounters enormous epistemological challenges when attempting to understand the qualitative nature of lived temporal experience (Fuchs). Although these are significant temporal dimensions with undeniable diagnostic value, the symptoms of mental illness typically place a particular quantitative emphasis on number of symptoms, duration, and frequency of episodes, for example. However, there is more to understand about our experiences of time than that. (quote). Not the least of which is the idea that time is fundamentally arbitrary. Our lives are mostly about us, subjectively, and about others, intersubjectively. In order to address the symptoms and nature of illness and disease, the Diagnostic and Statistical Manual of Mental Disorders and the International Statistical Classification of Diseases both handle time in an objective manner, i.e., as it is more frequently understood in terms of external clock time. Despite the fact that meaning, in particular,

frequently contributes a crucial element to understanding and treating patients with mood disorders, orthodox psychiatry unfortunately has a tendency to dismiss the experience of growing and lived time in favour of a static approach to observation. (Parnas et al 2003, 2005, Vogel et al 2018, Northoff et al 2018). Numerous generations of phenomenologically inclined psychiatrists have investigated the temporal dimension in psychopathology since Minkowski's work on lived time, (Sokolowski 1972). Jasper's work on the underlying structures of experience (1912), and Binswanger's early work on phobia (Binswanger 1911). (Palagassi & Fuchs). The temporal experiences of addiction, anxiety, autism, post-traumatic stress disorder, mainstream bipolar disorder, unipolar depression, schizophrenia, and bipolar psychosis are all covered in the contributions. According to (Martin et al. 2013), if our perceptions of the outside world are flawed, it stands to reason that our implicit perceptions of ourselves (Fuchs) will also be distorted. All mood disorders share this issue, and given their comorbid character, it may also be present in bipolar disorder (Mioni et al 2020) and general anxiety disorder (Brown 2007). (quote). When time is viewed in this way, it becomes a fundamental sign of mental illness that makes going about one's daily business nearly impossible. (Fuchs 2015). The work of Bergson, Husserl, and Heidegger has been extensively reviewed (see Martin et al. 2018), but the findings of a group of early clinicians who sought to use the phenomenological investigation of time and consciousness to improve their understanding of the underlying structure of temporal experience in their respective patients have attracted much less attention and interest.

In order to better clarify the variety of clinical dimensions that can be examined from a phenomenological perspective two examples will be

considered. They highlight the interlocking subjective nature of time and existence which requires us to beyond the rigidity of categorisation and take a closer look at the supporting psychological temporal structures, which are core features of mood disorders. (quote)

Firstly, Minkowski describes a situation in which he worked as the personal doctor for a 66-year-old man who was believed to be experiencing a serious case of depression or psychosis, resulting a severe loss of vital contact with reality. (Van Duppen 2017). The man suffered from intense remorse and experienced constant worry about his own impending agony and demise as well as the demise of his family members. Minkowski came up with the concept that would become his main premise while closely observing and interacting with his patient (Martin et al 2018). The first person to provide a thorough description of this kind was Eugène Minkowski. He claimed that he had seen a change in the way time flowed, experiencing it as stopped, immobile, and without "élan vital." (Stanghellini et al, 2015). His training had instructed him to evaluate the patient's condition by first noting the precise substance of the delusional episodes, then making an effort to link what he noticed to certain perception or judgement abnormalities. But he quickly reached a different conclusion. Where, he questioned, "does the patient's mentality conflict with my own?" (Minkowski, 1923. P131). According to Minkowski, the patient's most fundamental issue was temporal rather than perceptual or judgmental. Furthermore, the main distinction between the patient and the doctor was his temporal experience rather than the content of his delusions. (Aragona & Stanghellini, 2016). What appeared to be a distinct impairment of his patient's reasoning abilities was what prompted Minkowski to come up with this theory: Every day, while experiencing intense anxiety and fear,

the man would insist that his execution would occur that night, but it never did, and his patient was unable to comprehend the reality of the situation.

“First of all I consoled myself by thinking that when daylight came, he would see all of his worries had been unfounded. But the same thing kept happening the following day and the day after that, and after three or four days I had given up hope, while his attitude had not changed in the slightest. What had taken place? I quickly derived my predictions about the future from the observed facts because I'm a typical person. On the other hand, he had ignored the same facts since he was completely unable to benefit from them by connecting himself to the same future. I was now certain that he would carry on for days on end, claiming that he would be tortured to death that evening, and he did as he said, paying no attention to the past or the present.” (1923, Minkowski, p. 132)

The disorder had caused Minkowski's patient’s mental and emotional functioning to lag behind the truths of his ‘real’ circumstances. According to Minkowski, the reported condition involved the breakdown of a crucial element of typical human "inductive" reasoning, which he called the tendency to generalise. Minkowski suggested that this disorder was caused by "a profound disorder in his general attitude toward the future in particular." "That time which we normally integrate into a progressive whole was here split into isolated fragments," "the carry-over from past and present into the future was completely lacking in him," "he was completely lacking...a propulsion toward the future," and "the future was blocked" or "shut off" are just a few of the ways Minkowski describes the underlying disturbance in the patient's lived experience of time

(Minkowski, 1923, pp. 132–138). This theory is applied to bipolar mania by Minkowski in a significant part of his 1933 work Lived Time. "In my opinion, the structural analysis of the manic-excited person must be conducted in this direction, and this is especially true because it enables us to view manic excitement from the same point of view as melancholia, namely, as a disorder relevant to unfolding in time, or if you prefer, as a manifestation of a mental subduction in time" (Minkowski, 1933, p. 296). According to Minkowski, mania in particular has its roots in the temporal structures of human experience, an idea Husserl had previously revealed and discussed. More specifically, Minkowski believes that mania is caused by a defect in how time "unfolds," or how temporal experience is articulated into a past, present, and future. He refers to the underlying issue as a "subduction" in time, which is a "modification to an inferior level," borrowing a word from Mignard (1924). It is suggested by Minkowski to be described as follows: "A person experiencing manic enthusiasm just experiences the present moment and has little interaction with the outside world; he is no longer experiencing the "unfolding in time" as a whole. (Emphasis added; translation changed. Minkowski, 1933, p. 294) Following Husserl's earlier work, Minkowski suggests that a "subduction" in temporal experience occurs when a person's lived future is lost or altered when experiencing mania. The manic person turns into "the plaything of the now, always variable, shifting from one instant to the next," and he lives "in the grip of the now, in which he exists and out of which he is incapable of producing a present," according to Bergson (Minkowski, 1933, pp. 294–296). It's important to note another assertion Minkowski made regarding mania. According to Minkowski, mania not only entails living "only in the moment," but also a consequent limitation in "his relationship with the surroundings." In elaborating on this concept,

Minkowski describes how the manic person's vital link with reality shrinks in a way that, while it doesn't entirely destroy it, makes it extremely superficial.

The following is a summary of Minkowski's hypotheses:

(1) Bipolar, mania, depression, and other mood disorders are characterised by disruptions in the formal structure of temporal experience, which undermines indicative thinking. (2) Because they no longer experience time passing normally in terms of a coherent present, past, and future structure, people in such states are bound by their relationship to the past, present, and future. (3) The person experiencing any one or more of these mood type episodes "limited touch with reality" due to disruption in the temporal structure of perception

"The first to introduce phenomenology into psychiatry for practical purposes," according to Binswanger, was Minkowski (Binswanger, 1946, p. 231). Employing resources more particularly from the perspectives of Husserl and Heidegger and using Being and time as a model, Binswanger's work offers a framework for Minkowski's claims. His key argument is that manic episodes are characterised by a distinct, world-disclosive mood. The first is that this mood has a unique temporal structure, and the second is that the temporal disturbance in mania can be explained as a narrowing or "shrivelling" in how "temporality temporalises itself." Martin et al. (2018).

Binswanger asserts that primary optimism's manic state is both "world-disclosive" and temporally structured using Heideggerian concepts. Heidegger asserts that to be in a certain mood is to discover oneself in a

world with a specific texture. Binswanger begins his analysis of the manic experience by attempting to describe the texture of the manic optimistic world. He does so frequently in metaphorical language. "All-rosy," "cloudless," "bright," and "wide-open" describe the frantic globe (p. 58). Temporal aspects are present even at this early level of the phenomenological articulation. This shouldn't come as a surprise because optimism seems to be mostly a temporal phenomenon that implies a positive outlook on the future. According to Binswanger, the manic person always "plans, hopes or expects something delightful" and has the impression that time is unbounded. Even death, if it is thought of at all, is seen as a doorway to a different existence (p. 58). The manic universe is hence eternal in time.

Binswanger wants the reader to be able to relate to the underlying temporal experience patterns that underlie these characteristics of the manic mood and its environment. Heidegger's explanation of the specific temporal rhythm of "curiosity" and the description he offers are closely connected. Heidegger's description of the curious person is marked by a shallow, easily distracted, and passionate response to anything that appears. The "tempo" of manic curiosity, according to Binswanger, involves a type of hopping from one area of interest to another. He emphasises the important implication that manic behaviour never seems to persist but is constantly leaping off to something new, continuing Heidegger's views. The idea of being everywhere and nowhere is effectively integrated into mania, creating a more extreme kind of what Heidegger calls inauthenticity.

The viewpoint of Binswanger in 1933 is thought to serve as a Heideggerian model for Minkowski's theories. (Martin et al 2018)

According to Minkowski's first theory, mania is characterised by a disruption in the formal structure of experience; Binswanger seeks to define this disturbance in more detail. Binswanger links Minkowski's assertion that the manic person "lives in the grip of the moment" to a basic "shrivelling" in the way temporal experience unfolds. Binswanger describes manic [restlessness] as an extreme counter-phenomenon to what Heidegger refers to as the experience in which we are able to grasp a situation for what it is and respond to it resolutely. Minkowski claims that one result of these temporal disturbances is a loss of vital contact with reality

Manic optimism served as Binswanger's entry point for the phenomenology of manic experience. It would appear that optimism is an emotion that is inherently temporary and that is made up in part of an orientation toward pleasant things to come. In addition, as we previously mentioned, Binswanger himself expresses some of the unique temporal structures of the world, referring to optimism as mood reveals, including the sense of temporal openness toward an unlimited future. Therefore, there is at least a preliminary difficulty in reconciling all of this with his 1960 book Melancholia and Mania's conclusion about a type of temporality that is "shrivelled" or limited to mere presence. The book takes the form of a collection of research designed to offer a comprehensive theory of the two phases of what Binswanger refers to as "the manic-depressive antinomic" and which we would now refer to as bipolar I. First, the notion of "constructing the present," and second, Husserlian protention and retention, are the two key ideas for our purposes. The fundamental premise is that temporal experience is "made up" or partially formed from a collection of pretensions and retentions that experience is judged or evaluated against. According to

Binswanger, this "weaving up" of the present or primal sensation, as Husserl refers to it, is perverted in emotional disorders. We would be one step closer to articulating the phenomenological substructure of temporal experience in mania if we could give a perceptive explanation of this temporal construction, structure, and its perturbations. The good news is that. The promise is never properly kept, which is the bad news. The fact that Binswanger's works on this subject never depart from these initial metaphorical formulations is one ongoing issue. Binswanger elaborates on his governing in a number of suggestive ways. that the thread of the temporal fabric experiences a kind of "loosening" amid manic excitation (p. 96). The normative deliberate threads of protention and retention must still exist if we are to take this metaphor seriously; they are just not woven together as tightly as they are in other configurations of experience. Because they "slip through the gaps" in the weave of our temporal fabric, which lacks the degree of continuity necessary to "catch" them, some types of extended temporal objects may end up being impossible to experience altogether. However, in other sections, Binswanger asserts that during manic episodes, the temporal threads "ripped up into fragments," (p. 95), "retreat or indeed disintegrate [altogether]" (p. 115). The collapse of temporal experience would be more thoroughgoing in this application of the metaphor. The fabric must go if the threads do, too. Olga Blum (both) expressed her relief that Goethe's earlier creation of his Faust spared her the work of having to compose one similar to his, while also harbouring no scepticism that she would be successful at such an endeavour, in the entire sentence. Since there are no retentive moments, this is the pretension that remains, on which she could construct (p. 101, emphasis added). There is a third use of Binswanger's controlling metaphor in this passage. What he attributes to Olga Blum in this paragraph is not a sort

of experience in which the protentional and retentional threads are torn, nor is it a loosely knit temporal fabric. Olga Blum has a separate type of manic protention, but it "hangs in the air" and is not entangled with the correlative retentions.

Even if the ideas put out by Minkowski and Binswanger are rich and intriguing and were based on extensive clinical experience, they have inherent flaws. As we've seen, their arguments frequently use metaphors that are challenging to understand, and they feature ambiguities and seeming contradictions that are challenging to reconciled, which will be the challenge in the next section

Section 2(d): temporality, emotion, and mood

Understanding the actual or ‘real’ and ontological connection between moods and emotions as described by continental phenomenology is helpful in understanding mood disorders. Our emotions serve as the foundation for our thoughts, feelings, and interactions with other people. (de Sousa 1987). Emotions are sometimes confused with emotions and moods, but the three concepts are not equivalent. In contrast to the several varied definitions of emotion that come from cognition, the three terms are not interchangeable. Emotion is described as "a complicated reaction pattern, encompassing experiential, behavioural, and physiological factors," by the American Psychological Association (APA). People react emotionally to issues or circumstances that have personal significance for them. Three things make to an emotional experience: the subjective experience, the physiological reaction, and the behavioural or expressive reaction. Arousing from an emotional event are feelings. This falls under the same category as hunger or pain

because the experiencer is aware of it. An emotion produces a feeling, which can be impacted by memories, beliefs, and other things. The APA defines a mood as "any brief emotional experience, often of modest intensity." Moods are distinct from emotions in that they lack stimulation and have a vague beginning. For instance, insults can induce anger, but anger can also strike for no apparent reason. Human cognitive processes, such as attention (Vuilleumier, 2005), learning and memory (Phelps, 2004; Um et al., 2012), reasoning (Jung et al., 2014), and problem-solving, are all reportedly impacted by emotions (Isen et al., 1987). It's unclear exactly how the two relate. (Tyng et al 2017, Aho 2018) observes that moods should not be viewed as ephemeral and contingent features of experience in light of the APA's aforementioned reference to subject experience.

They are what constitutes what it means to be human, to exist, and to be alive in the sense that Heidegger intended. In this way, our affect and mood are structural. Or, as Heidegger put it, "situated, bound up in world situations that matter to us in one way or another." Emotions are only conceivable under this circumstance. Thus, emotions and moods are different. Emotions are purposefully focused at a particular event or item, hence they tend to be about important things. They frequently have a clear origin, are stronger than moods, and are far more transient. More pervasive and diffuse moods tend to be about both something and nothing. They are globally structured rather than localised emotional states. They expand the range of our perception by adding emotional colour to our encounters. (2013) Stanghellini & Rosfort. According to Heidegger, they are not byproducts of cognition or other types of intelligence; rather, they constitute a waiting environment in the universe to which we are sensitive and in which we immerse ourselves. In this

situation, one may feel both emotionally anxious and depressed about something as well as anxious and depressed in general. This illustrates a distinct type of effect. All kinds of emotional reactions and experiences can arise due to the overall mood. (Fuchs 2013)

Phenomenology views affects as encompassing phenomena that relate body, self, and time to the world, as well as to the nature of affectivity itself, in contrast to current thought, which believes that mental states such as moods and emotions are located within our heads. Traditional psychiatry took a predominantly intellectualistic view of delusion and hallucination as a disturbance of the logical mind, in conformity with the subordinate role of affects in the Western idea of the human person (Berrios 1985). Emotions were viewed as elusive mental states that were best converted to cognition or volition, disregarded, or both. For instance, melancholia had to be described on this basis as a combination of irrationality and behavioural inhibition. The majority of psychiatric treatments for depression up to this point have been based on cognitive models, which see the condition as being primarily a result of flawed information processing and skewed thinking (Beck and Alford 2009, pp. 224ff.). As a result, cognitive behaviour therapy was adopted as the standard treatment (Beck et al. 1979). Traditional psychodynamic theories, on the other hand, saw emotions like anxiety and sadness as only surface manifestations of the real tensions and drives buried deep inside the unconscious. Thus, there has never been a true psychopathology of affect. (Refer to Fuchs 2013)

Section 2(e): temporality and embodiment

The relationships between embodiment and temporality span the enactment of human existence to the micro-temporality of conscious experience. The rhythmicity of physiological activities is the first indicator of the fundamental internal time consciousness (heartbeat, respiratory rhythm, daily periods, etc.). Additionally, the bodily desires, drives, and needs—which are sometimes referred to as conations—decisively shape the temporality of primary experience in the future. Contrarily, the body creates an extract of sensorimotor and affective experiences that are stored in implicit or body memory, so influencing a person's abilities and tendencies. Last but not least, the fundamental processes of birth, growth, ageing, and death define existential temporality.

Intersubjectivity, body, and time are all intimately related. First, interbodily resonance establishes the child's early development as the dominant experience of the shared present. As a result, a fundamental contemporality that serves as the foundation of social life eventually persists in social synchronizations and temporal patterns. This temporal alignment is, however, also susceptible to desynchronizations, such as those brought on by task backlogs, guilt, regret, or bereavement, which call for psychological resynchronization procedures. These connections are all prone to a variety of disruptions, including those observed in psychopathology, which play a vital role in determining the onset and progression of mental diseases. See (Fuchs 2020) (Fuchs 2020)

Section 2(f): temporality, mood and attunement

Moods are an additional layer of emotional life that colour all present experiences and give them a certain hue. Elation, euphoria, tranquilly, boredom, sadness, dysphoria, impatience, anxiety, or melancholy are

common examples. Moods can be roughly described as general, essentially evaluating (i.e., pleasant or unpleasant), but non-intentional emotional states that make a person more likely to perceive themselves and their environment in a particular manner and act accordingly. Consequently, emotions are essential ways of being in the world that show "how things stand" in our lives and how we are inclined to respond to the current circumstances. In what follows, I will expound on this description by describing distinguishing characteristics between mood and emotions

Unlike our emotions which can be fleeting moods are more prolonged affective states that frequently continue for hours, days, or weeks in contrast to our emotional experiences, which are normally more transient. They follow a gradually rising and declining course without having a clear beginning or finish. In contrast, emotions tend to be episodic, dynamic, and short-lived; they often peak quickly, increase in intensity, and then subside after a few seconds, minutes, or hours. As a result, while moods frequently remain in the background of the experiencing field and need not even be conscious, emotions become dominant for a brief period of time (e.g., one may deny being in a dysphoric mood while other persons are aware of it; a depressive patient may have a distorted view of his situation without being able to attribute this to his altered mood)

Section 3(a): mood disorders, disturbances and temporal change

Differentiating between bipolar, bipolar depression, unipolar depression, mania, hypermania and schizophrenia is complex and uncertain and elongated process. New research indicates that bipolar disorder requires

a more comprehensive and broader approach to diagnosis (Fuchs 2019, Stanghelinni et al 2016). There is growing evidence that bipolar disorder is a neuroprogressive disorder, meaning that extended disease duration results in more prominent clinical and neuropathological alterations that may cause treatment resistance and neuropsychological deficiencies. Several research also back up the idea that there is a prodromal stage before an illness manifests itself. Some writers have proposed using the staging model in psychiatry in an effort to introduce a longitudinal perspective of the illness in the diagnostic process, which would cover the early phases of bipolar disorder and guide therapy and prognosis. The staging model is based on the idea that illnesses develop over time in a predictable pattern, from prodromal or at-risk stages to chronic ones. 2018 (Salagre et al). Identifying With the underlying temporal features of mood disorders may help with the aim for more precision

There has been much discussion about how time is a crucial component of bipolar and other mood disorders, within the context of psychopathology Patients with manic or depression for eg, feel that time is moving too quickly or slowly. (Moskalewicz 2020, Teixeira et al, 2013, Northoff et al. 2018, Fuchs, 2013, Fuchs 2019, Stanghellini 2016). Bipolar disorder is defined by the occurrence of opposing symptoms in the affective, cognitive, psychomotor, and social domains. Following in the footsteps of Bergson, Heidegger, Husserl, and Merleau Ponty, early psychiatrists like Minkoswksi, Jaspers, Binswanger and Tellenbach, many contemporary writers like Stanghellini, Gallagher, Zahavi, Parnas, Sass and Fuchs, relate to the idea in their various studies of schizophrenia and mood disorder, that the perception of time plays a crucial component in eliciting mental health symptoms and still remains a major topic of psychopathological research, especially for

psychopathology. (Fuchs & Pallagrosi 2018) refer to the need to combine a categorical and dimensional approach, such as might be the case with a neurological and phenomenological study. Unlike other dimensional approaches , phenomenology, following the traditions of Husserl scientific approach, adopts a third, even a second person view of first person subjective time. (Zahavi 2007). This approach might help promote a better understanding of the relationship between neuropsychological dysfunction and altered temporal experiences. (Fuchs 2010)

Living and experiencing time becomes explicit or even object-like and transforms into a never-ending source of guilt during melancholy despair. Time has been so reified that it is now both an unchangeable facticity of the past and an unavoidable, predetermined future. This experience's psychotic climax, which included thoughts of irreparable guilt or impending death, also points to a fundamental disturbance of constitutive temporality. The stream of consciousness does not become fragmented, as it does in schizophrenia, but is instead slowed down or inhibited. Since depression affects the conative-affective dynamics of the stream of consciousness rather than its coherence, it differs significantly from the incoherence and blocking of thought that characterise schizophrenia to the point of thought withdrawal. In addition, we suggest that depression causes a desynchronization of the intersubjective dimension of temporality, both at the fundamental level of the minimal self and at the level of the narrative self. (Martin et al 2014). Being conscious, we are always conscious of ourselves as an immediate subject of ongoing experience.

Alterations to the core self is central to research into schizophrenia. Key schizophrenia symptoms can be thought of from a phenomenological perspective as disturbances of the transcendental constitution of the "inner time- awareness" or of lived time. Stanghellini et al. (2016) discovered the fragmentation of the typically continuous implicit flow of time in their study on altered time-experience in schizophrenia. Disorders of cognition and attention, the breakdown of purposeful activities, the dissolution of fundamental self-coherence, and, in acute psychosis, the externalisation of the fragments in the form of first-rank symptoms are some manifestations of this disruption. This analysis paints a very different image when compared to how time is altered in affective disorders: The synthesis and continuity of inner time-consciousness always persists, in both depression and mania. The conative dynamics that Fuchs, and consequently the affective tension that propels the intentional arc onward, are either absent or exacerbated. Therefore, affective illnesses exhibit a retardation or acceleration of lived time, which is subjectively perceived as time "slowing down" or "speeding up," as opposed to the fragmentation of lived time in schizophrenia (Fuchs 2013).

Stanghellini et al’s comparative research have also supported this distinction (2016, 2017). As a result, the blocking and incoherence of thought that characterise schizophrenia vary fundamentally from the inhibition and slowing of thought that are present in severe depression. This serves as another example of how lived time's conative dynamics and transcendental synthesis differ: The first refers to the sequencing and structuring of time in which awareness flows, whose abnormalities show up as cognitive symptoms. The second refers to the emotional or vital dynamics of the flow, which might change depending on its

motivation and goal-directedness. In experimental studies of time ratings, it was frequently shown that depressed persons see time as slowing down while manic patients experienced time as speeding up (Bech 1975; Kitamura and Kumar 1982; Münzel et al. 1988; Mundt et al. 1998; Bschor et al. 2004)

The disturbance of time is twofold. On the one hand, there is a loss of drive, desire, libido, interest, and attention, which translates into a decrease in the conative and emotional dynamics, which results in psychomotor inhibition and a slowing down of lived time. According to Fuchs (2005) and Ratcliffe (2013), this is also manifested in the lived body's increasing rigidity and reification, as well as in feelings of physical heaviness, exhaustion, oppression, and general anxiety. On the other hand, this embodied experience is also linked to a loss of intersubjective synchronicity because depressive patients lack the bodily resonance of emotions required for intercorporeality. On a subconscious level, intercorporeality, a constant attunement and emotional exchange that results in an inter-body resonance defines our social connections with others. This is a case of cherished synchronicity. On a direct and internal level, where our exchanges entail a more formal and planned arrangement of timing. This situation is dynamic and goes through different phases, such as "too early" or "too late," for example, when external time scheduling is involved. This "shared now" that we experience with others is described by Fuchs, (2019) as a synchronicity, desynchronisity, or an acceleration or deacceleration of time, all of which are relative to an intersubjective and to some extent objective global environment. The subjective experience of time's irreversibility in light of the differences or departures from those with whom our lived time is tuned might lead to serious depression or psychosis. (Swartz &

Moskalewicz 2020). Depressed persons feel the painful incapacity to empathize with other people, to inter relate or affected by them. Therefore, the loss of basal contemporality or a social desynchronization occurs along with the failure of conative and emotional dynamics. (Fuchs 2001, Fuchs 2019).

Tellenbach defined melancholy as the incapacity of the patient to live in the present and let go of the past (which also entails an unwillingness to grieve). The gloomy personality type's hyper-conformism may also be seen as an effort to avoid or undo previous ruptures or desynchronizations that the subject found to be highly painful in their early lives. The patient might have gone through some unpleasant loss of resonance in his early affective interactions with others, it was hypothesised. This would imply that subsequent desynchronizing experiences (such as failing to meet expectations, suffering heartbreaking losses, or experiencing separation) powerfully resonate with that experience and manifest as extremely upsetting disruptions in the flow of time. In this case, it will be impossible for the narrative self to actively synthesise biographical time and to continually integrate the past and the future. In order to avoid becoming a victim of time and being controlled by it, this active synthesis process does in fact involve the ability to close the past.

At this moment, a depressive disease could develop, signifying a shift from an existential or intersubjective desynchronization to a biological one (overall organismic stress reaction connected with various disturbances of biorhythms, sleep, appetite, hormones, etc.). The social desynchronization is further exacerbated by depressive psychopathology due to the resulting loss of motivation and conation.

While the conative momentum of time is impacted, the constitutive (protentional, presentational, and retentional) synthesis of inner time consciousness is unaffected. The affective tension and energy that propel the deliberate arc ahead are absent. This component is essentially intersubjective because conation entails the affective relationship with others.

In terms of explicit time, sadness constantly carries an indictment from the past. Future is perceived as a sequence of events leading to a tragic, irrevocable conclusion that has already been foreseen in the past. The change from gloomy hallucination to complete desynchronization from intersubjective time is discernible. Its nihilistic delusion climax, the notion that one has already passed away or that the world no longer exists, is comparable to the depersonalization experienced by schizophrenia, but it is ultimately caused by the loss of conative-affective dynamics rather than a breakdown of the transcendental synthesis of temporality

In order to evaluate and examine time disruptions, a range of non-phenomenological experimental procedures have been used, with variable results. For instance, studies on how people perceive time have produced varying conclusions about how such conclusions might relate to mood swings in MDD (Thönes & Oberfeld, 2015). The observation of a subjective decline in the experienced velocity of the flow of time in depressive illnesses is one of the more compelling findings from this line of research. This decline may be the most noticeable and frequently documented disruption of time experience in MDD in the literature. It was either derived from the qualitative descriptions of the patients (Lewis, 1932; Hartocollis, 1975; Wyrick and Wyrick, 1977; Kuhs, 1991; Mundt et al., 1998; Bschor et al., 2004; Stanghellini et al., 2016, 2017),

or it was obtained by using additional questionnaires or subjective quantitative measures (Lehmann, 1967; Bech, 1975; Kitamura and Kumar, 1982; Richter and Benzenhoefer, 1985; Blewet, 1992)

Disturbances of temporality in mania, are readily observable in the disorder, but are often underemphasised or omitted from present day research.They do not meet the requirements for a manic episode under DSM-5, ICD-11. Only the duration and frequency of manic episodes are referred to. Simply put, lived temporal experience is largely ignored. However, the perception of time is essential to comprehending the disorder. Mania is a "manifestation of a mental subduction in time," as Eugène Minkowski observed (Minkowski 1970: 296). Mania is commonly thought to have an accelerated pace, and with good reason. Studies on how people perceive time have revealed that when it comes to short durations (in the seconds range), manic people tend to overestimate temporal length activities and underestimate clock time (Tysk 1984; Tysk 1985). These results suggest that the subjective perception of time passing more quickly for people than for controls. The internal clock hypothesis states that this indicates that they have "extra" time available to them since their internal clock runs more quickly. When a memory component participates in the temporal judgement, these findings are valid only in the seconds range and not in the minutes and hours range. Manic people frequently see longer intervals as shorter intervals (underestimating rather than overestimating time) since the attention shifts from perception to the duration of longer intervals (Mezey and Knight 1965; Lehmann 1967). In other words, their time becomes shorter in the past. One theory is that a manic episode's positive emotional attitude causes an underestimation of lengthier duration (in the hours range) and the perception that time is moving more swiftly outside of the

patient's body (Mezey & Knight 1965). But contrary to what phenomenology says, this hypothesis holds that affectivity is more fundamental than chronological experience. There is experimental research that indicates that quick thinking itself increases not only good affect but also sensations of strength, inventiveness, and grandiosity (Pronin and Wegner 2006; Pronin et al. 2008). Additionally, the effect is enhanced by thinking diversity, which is analogous to the manic flight of ideas. According to a study, independent of the content of the thoughts, thinking sequences that are very variable rather than revolving around a single theme elicit higher pleasant impact (Pronin and Jacobs 2008). According to Neilzén and Cesarec (1982), listening to music at a faster tempo makes manic people feel happier rather than more tense. Such music seems more alluring. The preferred (median) pace of music for manic individuals is as fast as 152 mm, therefore it stands to reason that they could find the average speech rate dull (Stein 1977; Stein 1988).

By definition, studies on time perception only tend to examine the reflective experience of time and thus do not have a more fundamental (pre-reflective) understanding of temporality as a defining feature of human experience. (Fuchs 2019). Furthermore, in cognitive studies, the perception of time moving quickly or slowly does not correspond to a cognitive or subjective underestimating or overestimation of time. Thus, it is important to keep in mind that acceleration is not just related to objectified or clock time. It has to do with a loss of simultaneity with social, intersubjective temporality as well as natural rhythms (Fuchs 2013). A continuum exists, starting with the (natural) sense of being late and the ensuing need to wait, moving through boredom and impatience, and ending with agitation and mania. The scale of asynchronicity

corresponds to a spectrum of emotional experiences, yet being "faster" than the outside world is not in and of itself unhealthy.

We don't get to the heart of manic temporality through either the affective or quantitative perceptions of time. According to Minkowski's theory, understanding its essence requires a more structurally focused phenomenological examination. Minkowski noted that manic patients do not progress chronologically. Syntony, or emotive interaction with the environment, is distorted in them. Minkowski explained syntony in terms of experienced synchronism between personal and ambient becoming by utilising the Bergsonian concept of time. He made the crucial observation that manic temporality goes beyond simple acceleration. The activities of manic individuals are not only more rapid and fast-paced, but also degraded (Minkowski 1970). Mania occurs when acceleration exceeds an affective or emotional threshold at which the existing temporal framework of perception breaks up. Quantity changes into quality as time accelerates to the point where the connection between its three dimensions of past, present and future is lost.

Unlike those who have schizophrenia, those who are manic maintain contact with reality even though they are unable to penetrate it, according to Minkowski. (Parnas). However, the connection is fleeting and superficial; it is only a game played between moments in time rather than a lasting relationship. Although their lived present lacks boundaries with the past and future, manic people tend to speak in and remain in the present. One empirical investigation that supports such a shift in manic participants' concentration from the past to the present and away from the future is (Gruber et al. 2012). They are essentially "trapped" in the current emotional state when compared to normal control cases.

Mania thus involves a sense of independence towards the future, which is distinct from melancholia and notably different from schizophrenia (Sass and Pienkos 2013). In addition to being more impulsive, those who are manic also tend to have lofty aspirations and extravagant ideas of what is attainable (Gruber et al. 2012). They unavoidably advance ahead of others as conation increases, but there is also a qualitative change at play (Fuchs 2013). In terms of time, the manic psychotic stage involves not just the subjective experience of thinking and affective acceleration, but also the realisation of a distant future in the present. In fact, typical manic delusions frequently involve seeing an unreal, projected future self in the present. "I want to be a model, an astronaut, a surgeon, a chef, and an architect" (Behrman 2003).

A manic person rebels against his own existence and reality. His adversary is the present. Manic exhilaration resembles the exhilarating surge of an addict and hides the inability to accept the limitations of the present (Moskalewicz 2016, 2020). A manic individual rebels against the present and longs for change. The insurrection is sparked by the frailty of human existence itself. Even if it is common to depart from any given fact, there are widely acknowledged boundaries to what can be altered. In contrast, the manic activity gets unusually powerful. According to a study, the sheer perception of authority makes one feel as though they have more time on their hands (Moon & Chen 2014).

The manic superman syndrome (Salvatore et al. 2012) causes people to feel as though their future selves are already here, disregarding the conventional temporal structure of experience completely. A person encounters the phenomena known as the "decontextualization of possibilities" or a "endless possibility," which is characterised by

unrestricted, unstructured, but excessively alluring possibilities (Bowden 2013: p. 115). The latter idea suggests that it is more complicated than just the availability of options. No possibility, no expectation, and no future beyond the present can actually occur, according to the idea of endless potential. It's a "radical rewriting" of the manic self, according to Bowden (Bowden 2013). It is radical because it has no clear future horizon. Even though facticity is rebelling, only the here and now is significant. The manic self lives in the here and now and lacks a reflective perspective on time. The effects of acts are either hardly or never taken into account. Such a radical view involves immobilising the manic self in the process of being, which is also a feature of psychotic temporal perception in general (Moskalewicz 2018). Mania thus interferes with the typical temporal organisation of lived experience, where the dimensions of the past space of experience and the future horizon of expectancy meet in the extended present.

Futures can only be perceived as horizons of the present, and nothing else. Mania makes it seem as though the future has already occurred. If one has already profoundly advanced existentially in his illusory universe, there is no other option but to live in the present. The only future that matters is your own, not the world's. This separation between the self and the outside world where only the self advances breaks up the ordinarily continuous temporal structure of experience. Since the latter requires a definite future horizon to be a present, the future that is now is neither a present nor a future (which is just a horizon of the present). As a result, a manic person's current lived experience is not temporal. In the same way that grief hides beneath manic joy (Binswanger 1964), the present-day future paradoxically shows its atemporality. Manic people contest the inevitable temporality of human

existence, which is precisely why mania is a disease as the temporal underpinnings of existence cannot be ignored without unfavourable effects. Thus, experiencing timelessness also means experiencing the discontinuous present. The need to rebel against the present moment is an experience that has to be endlessly realised

Section 3(b): psychopathological mood and temporal challenges

One of the fundamental issues in psychopathology is how affective and psychotic forms of mental illness differ from one another. (Sass & Pienkos 2013). It was described by Binswanger as the primary issue plaguing psychiatry (Tatossian 1997). Karl Jaspers (1946–1963) draws our attention to the importance of being able to distinguish between that which is affective or emotional and meaningful, permitting empathy, and that which is unintelligible and irrational.

The subjective experiences of both types of disease are one area of investigation. Credible research into the subjective lives of affective diseases has been hard to come across, as Sass & Pienkos (2013) note. 2001, 2005, 2013, and 2016 (Fuchs, Stanghellini). Studies that have attempted to bridge the gaps have primarily concentrated on observing actual indicators and symptoms. This can be measured in a way that is more in line with quantitative analysis. Thus, the most important variations and characteristics are readily missed. The distinctions between the two are, at best, tenuous. The predominant viewpoint continues to be Kraeplin's 1913 distinction between schizophrenia and affective diseases as a continuum or dichotomy. Like the majority of his colleagues in academic psychiatry, Kraepelin believed that the "actual world" existed completely independently of anyone who

saw, discussed, or studied it. Other people and their normal or abnormal mental processes were part of this realm. As a result, Kraepelin implicitly agreed with a "realistic" framework in the philosophical sense. He frequently emphasised the need for the psychiatric researcher to report honestly both what "nature shows" to them and what "truly" exists. Any realistic philosophy must start with this as its guiding principle.

It is clear what this means for mental nosology: Kraepelin strongly supported the idea that various mental illnesses are categorically unique things, or, as he preferred to say, "natural disease entities." He was adamant that these existed apart from the researcher or clinician. They both discuss "given things" and describe what they find. Their own efforts to gather information and develop scientific ideas or diagnostic standards are undervalued or could even go unreported. Kraepelin's emphasis on the descriptive approach in psychopathology in general and in psychiatric diagnosis in particular, which meant a generally dubious perspective towards heuristically oriented approaches, was one result of this fundamental attitude. Later, when discussing modern operationalized mental diagnoses and the actual subject of "reification" of psychiatric diagnoses, these difficulties will be brought up once more. Hoff 2015.

Debatable issues include whether there is a continuum or whether psychosis is a valid category that can be detected phenomenologically, as well as whether the distinction between schizophrenia illnesses and affective ones is qualitative and subjective, or categorical and separate. Nevertheless, it is widely documented that depression occurs in schizophrenia frequently and in a variety of forms, and that the condition's severity can vary or be the same as that of someone who has

lyre sadness. In some cases of depersonalization, paranoia, mania, melancholy, psychosis (Radden 2009; Sierra 2009), as well as anxiety, are also present. 2013 (Sass & Pienkos). Melancholic depression, which often borders on psychosis, is a severe kind of depression that is fundamentally different from major depression and has its own unique mood. There is still disagreement over whether melancholy symptoms should be considered a more severe subtype of major depressive disorder (MDD) or a different diagnostic entity, according to (Dold et al. 2021)

Section 3(c): temporality and borderline personality disorder.

It has long been believed that borderline and narcissistic personality disorder and bipolar affective disorder share a great deal in common. (Bassett 2012). Clinical similarities between Borderline Personality Disorder (BPD) and Bipolar Affective Disorder (BD) have similar characteristics make it challenging to distinguish between the two disorders. The history of early life stress (ELS), together with its relationship with temporal. The history of early life stress (ELS), together with its relationship with temporal structures can help differentiate between the two conditions. (Mazer et al 2019). The concept of Borderline Personality Disorder (BPD), as defined in the DSM-III in 1980, emerged from Gunderson & Singer´s review (See Gunderson et al 1975), that identified alleged descriptors in the areas of dysphoric affect, impulsive action, interpersonal relationships, quasi-psychotic cognitions and poor social adjustment (se also Fuchs 2007)

Fuchs reminds us that it’s only the biographical level of temporalization which is impacted by reactive, neurotic, or personality disorders; our

sense of implicit or ‘lived ’time as a fundamental dimension of our daily life, is preserved. However, in extreme circumstances, this may very well result in a narrative identity fragmentation, which can further affect the underlying temporal structure we have of ourselves. The idea of the self has many facets and layers, and some of its most significant characteristics fall within the narrative domain, which is founded on a temporally enduring self-identity and which includes us keeping a memory bank. The narrative identity suggests a process of integration, or at the very least a quest for coherence of the personal history, present, and future, is what French philosopher Paul Ricoeur uses to define the basic essence of the human being. This process or experience is essentially social; it begins with our earliest childhood relationships and lasts the remainder of our life. Personal identity also has a strong connection to complex interactions with other people who operate as our implicit auditors, witnesses, and in a way, "co-authors" of our life stories.

The difficulty in establishing the differential diagnosis between both diseases is mostly brought on by the clinical traits they share, particularly emotional instability and impulsivity, which make it difficult to differentiate between BPD and BD in the clinical context. Additionally, comorbidity is frequent: compared to 10% of bipolar I patients, 20% of bipolar II patients have comorbid BPD. Additionally, the idea of the bipolar spectrum has been put out in this context to broaden the BD diagnosis to include a greater variety of disorders, particularly BPD. (Paris 2009).

The association between both illnesses has been examined under a number of areas, including investigation of co-occurrence, familial

prevalence, response to medication, phenomenology, longitudinal course, and aetiology, in order to aid in the differential diagnosis between BPD and BD. The findings of these investigations sometimes yield contentious and ambiguous information, although new research suggests that biological and psychosocial factors may play a larger role in BPD than in BD [14].

According to (Krahn 2011) and Leichsenring et al, 2011), BD and BPD are two mental diseases with high death rates, substantial functional impairment, and a high comorbidity of roughly 10% in clinical settings (Zimmerman and Morgan, 2013).

Between BD and BPD, there are significant similarities in the symptoms and brain imaging results. Indeed, emotion dysregulation syndromes have been used to describe both conditions. As an illustration, well-known theories on the aetiology of BPD (Koenigsberg et al., 2002; Linehan, 1993) contend that it is best characterised as an emotion dysregulation disorder brought on by increased emotional reactivity and an inability to regulate emotional responses, including coping with low-stress social situations. In terms of BD, euthymic BD patients have been found to be more sensitive to emotional stimuli, while manic BD patients have been found to be more sensitive to emotional stimuli than healthy controls (Henry et al., 2012). Additionally, impulsivity, affective instability, or emotion dysregulation, sexual disinhibition, excessive spending, alcohol and drug abuse, and, occasionally, intentional self-harm and suicidality are early indicators of both BD and BPD (Chanen et al., 2016). (Bayes et al., 2019). Due to the shifting mood symptoms seen in BPD patients, BPD has been considered as a "ultra-rapid cycling" sub-

type of BD. It is unclear whether BD and BPD are independent or interdependent disorders (MacKinnon et al., 2006).

However, there are significant distinctions between BD and BPD in terms of treatment outcomes, inheritability, age of onset and duration of the illness, and interpersonal challenges that are present in BPD but not in BD (Sanches et al., 2019). It's interesting to note that anxiousness is one of both diseases' most common symptoms (Benazzi, 2006; Henry et al., 2001; Kinrys et al., 2019). According to certain BPD estimates, the prevalence of any sort of anxiety disorder might reach 89%, with the possibility that this number will go down with time (Zanarini et al., 2004). In addition, compared to patients with other personality disorders, BPD patients have a higher prevalence of anxiety disorders (Silverman et al., 2012). Anxiety disorders may also appear before bipolar disorder (BD) manifests (Caricasole et al., 2019), and it has been proposed that they may represent an unusual manifestation or prodromal stage of BD (Du et al., 2017).

Section 3(d): temporality and anxiety disorders

Research has repeatedly shown that anxiety and depression frequently co-occur (Maser & Cloninger, 1990). Compared to other diagnostic categories, such as impulse-control or substance use disorders, major depressive disorder (MDD) co-occurs significantly with each particular anxiety condition (Kessler et al., 2003; Kessler, Chiu, Demler, & Walters, 2005; Kessler, Merikangas, & Wang, 2007). Additionally, co-occurring anxiety and depression has detrimental effects beyond those of either condition alone, including a worse prognosis, difficulties in school, a higher risk of suicide, a reduced quality of life, and poorer treatment

outcomes (Kessler, Stang, Wittchen, Stein, & Walters, 1999; Ledley et al., 2005; Lewinsohn, Rohde, & Seeley, 1995; Rush et al., 2005; Young, Mufson, & Davies, 2006). It is obvious that a thorough understanding of comorbidity's causes has significant theoretical and practical ramifications, but many aspects of comorbidity are still poorly understood.

The two main types of comorbidity models in use today, described as the "lumper" perspective, which holds that anxiety and depression and their individual components cannot be meaningfully distinguished, and the "splitter" perspective, which holds that anxiety and depression are fundamentally different phenomena that can be distinguished by different risk factors, courses, and phenomenological experiences (see Wittchen, Kessler, Pfister, & Lieb, 2000). Some models, like the frequently referenced tripartite theory (Clark & Watson, 1991; Watson, Clark, et al., 1995; Watson, Weber, et al., 1995), split and lump by identifying overlapping factors (negative affectivity) as well as particular components distinct to anxiety (physiological hyperarousal) and depression (anhedonia), but ultimately take the lumper approach by attributing comorbidity to shared substrates.

Although the temporal order of anxiety and depression may have significant conceptual ramifications, there are significant gaps in the literature that need to be filled before we can turn this observation into testable comorbidity models. First, the majority of research have utilised follow-up intervals of months or years when evaluating temporal relationships (Burke et al., 2005; Cole et al., 1998; Orvaschel et al., 1995; Wittchen et al., 2000). Contrarily, the majority of the suggested mediators of the relationship between anxiety and later depression (such

as anxious rumination and hopelessness, interpersonal dysfunction, and behavioural avoidance; Grant et al., 2007; Moitra et al., 2008; Starr & Davila, in press) would be more likely to occur over much shorter time periods, such as days and weeks. Understanding the microprocesses of the phenomenological experience can help us comprehend the emergence of symptoms, which may subsequently result in macro-level alterations. Therefore, it is necessary to clarify daily patterns of co-occurrence.

Similar to most comorbidity research, earlier studies on temporal relationships concentrated on diagnosable anxiety disorders and serious depression. Although this is instructive, it may also be crucial to look at how the symptoms of anxiety and depression co-occur during episodes of diagnosable disorders (i.e., anxious and depressed mood symptoms). Mineka, Watson, and Clark (1998) pointed out that the first step in studying disorder comorbidity is to look at how the symptoms that characterise the illnesses co-occur. In other words, symptom co-occurrence may have effects on disorder comorbidity even though it is not the same as the term. Symptoms below the threshold frequently progress to problems (Judd et al., 1998). Furthermore, symptoms make up illnesses since symptoms are what they are. Thus, the mechanisms underlying symptom co-occurrence and disorder comorbidity may be comparable. In addition, the co-occurrence of depressed and anxious symptoms is almost two times as common as the co-occurrence of diagnosable depression and anxiety disorders (Hiller, Zaudig, & von Bose, 1989), which may indicate that the mechanisms behind co-occurrence operate at the symptom level. If that is the case, a deeper comprehension of the time link between symptoms (especially cardinal

symptoms like a depressed or anxious mood) may be essential to comprehending comorbidity.

Furthermore, comparing temporal connections between daily symptoms to conventional designs has a number of methodological advantages. The confounding influence of mistakes in the underlying nosological system is removed by investigating symptom co-occurrence within diseases rather than diagnostic comorbidity (Brown & Barlow, 1992; Mennin, Heimberg, Fresco, & Ritter, 2008). For instance, there are various diagnostic criteria that are comparable between MDD and generalised anxiety disorder (GAD), such as difficulties concentrating, restlessness, psychomotor agitation, exhaustion, and sleep impairment. This overlap obviously has the potential to increase the likelihood of comorbidity. Instead of focusing on illnesses, one way to address this issue is to look at correlations between symptoms. Temporal correlations between anxiety and mood. Starr & Davilla, (2012) report that anxiety disorders tend to precede depressive disorders, which although a general estimate is certainly relevant to comorbidity diagnosis. Whereas Kouros et al, (2013) report a similar finding, adding that anxiety and depression tended to endure and extend over time, due to a number of genetic, social and environmental factors.

The fact that different diseases have varying ages of onset may also have complicated many earlier investigations on the temporal sequencing of anxiety disorders and serious depression. For instance, anxiety disorders frequently start in childhood, whereas depression usually starts in adolescence or later (Kessler, Berglund, Demler, Jin, & Walters, 2005). (Lewinsohn, Hops, Roberts, & Seeley, 1993). The apparent temporal precedence of sadness over anxiety may simply be a

result of divergent developmental trajectories. This possible confound is removed when examining daily mood fluctuations, which may be a more effective way to test the hypothesis that certain characteristics of anxiety are risk factors for depressive symptoms. Additionally, examining symptoms on a daily basis may reveal patterns that are not visible during lengthy follow-up periods. For instance, a current study found that sadness and GAD frequently co-occur (Moffitt et al., 2007). Even in this instance, anxiety and depressed mood may occur concurrently; however, by focusing primarily on diseases with lengthy follow-up periods, this conclusion would be hidden.

Understanding daily symptom co-occurrence may be helpful in and of itself, in addition to the methodological advantages and consequences for comorbidity models, since it would improve our comprehension of the phenomenological experience of the naturalistic course of symptoms during episodes. Investigating how symptoms of diseases manifest on a daily basis may offer a more nuanced understanding of the experience of comorbidity because anxious and depressive moods differ significantly from day to day (de Vries, Dijkman-Caes, & Delespaul, 1990). Comorbidity, for instance, usually implies that two disorders are experienced simultaneously, but in people with comorbid disorders, it is unclear whether symptoms within each disorder emerge and disappear in roughly synchronicity (i.e., people experiencing depression on the same days they experience anxiety), whether symptoms of one disorder cause symptoms of the other, or whether symptoms of each disorder operate largely independently. In addition, different types of symptoms that make up syndromes may manifest in various temporal patterns. For instance, changes in one symptom of depression (such as sad mood) may be predicted by anxiety, but not changes in another (e.g.,

anhedonic mood). In the end, a deeper comprehension of the descriptive character of symptom co-occurrence may lead to theories on how symptoms and illnesses are kept in check (Davila & Starr 2012), and temporality is the most fundamental dimension of all.

Summary

In presenting this research study, the aim has been to be as specific as possible in addressing the problem of diagnosis in mood disorders, given the cross overs and similarities of symptoms. This problem has been situated against the general backdrop of classification and categorisation constraint, which has deep historical and cultural roots, of symptom parameterisation, operational control and therapeutic limitation. The need for alternative measures to help improve the diagnosis of mental health disorder has been examined from a dimensional perspective, which has regarded the nature of mood as subjective and ontologically as a fundamental aspect of our existence and not just as a mental or cognitive process that has someone become deficient and, or abnormal. We are according to Heidegger as well as being rational, social and practical creatures, we are affective and emotional too. Our moods are our guides to our future actions. Differentiating between mood and emotion can help differentiate diagnosis, by characterising the temporal nature involved. The challenge to healthcare authorities and practitioners alike is how to manage their employers and patients expectations, given the increasing number of mental health cases that are arising post Covid 19. Mood disorders are also growing and comorbidity remains a real problem for diagnosis and the treatment pathway that entails. Temporality is part of our everyday existence and as husserl proposed, our consciousness, or related with

the world we live in, is the most basic human feature we possess, that is to say, we experience everything, phenomenologically, intentionally and temporally.

Chapter 3: Methodology

Section 1: Varieties of phenomenology

Historically, psychology has worked diligently to constitute itself as one of the natural sciences, with studies concerned with the physical world, specifically through the adoption of certain objective and empirical values and procedures. (Thilly 1906, Hatfield 1994). In doing so, much of psychological inquiry has involved the use of controlled environments or controlled aspects of environments and some form of quantified abstraction and measurement procedures (Giorgi, 1985). Beginning with the application of experimental procedures psychological inquiries became about studying behavior in the form of preplanned events confined within contrived environments (laboratories) requiring the (1) isolation of phenomena, (2) the systematic manipulation of variables, and (3) repeatability of the process (Romanyshyn & Whalen, 1989). The isolation of psychological phenomena from their natural contexts into the “sterile laboratory” contexts of experimental methods presupposes that the phenomena exists independent of the context in which it is found in everyday life.

If a psychological and empirical approach to any conscious phenomenon is in fact possible then it must assume the existence of consciousness along with a sense of a lived and worldly experience, all of which makes a phenomenological experience of mood possible in the first place. This is true even if a clinical and temporal examination of mood disorder is possible. If so, then this must logically follow from an inherent pre reflective structure that precedes and supports it, as well as a natural attunement, to use Heidegger's phrase, with an inhabited reality. This is

what Husserl claims must happen. In this context, "mood" is properly described as "attunement." Dasein is said to be constantly in a mood or attunement by Heidegger. Dasein may be in a good or terrible mood, and it may be about anything or nothing at all. Heidegger contends in Being and Time that because of our emotions, the universe "never remains the same from day to day." The attunement of the researcher opens up the universe it explores, so even the purest theory has not completely left all feeling of mood behind it since this is not conceivable. As a result, even scientific inquiry cannot know reality in an absolute way. The world is only accessible to us because of our attunement; they widen the door for us. Kuperas 2007, Von Herman 2013)

In contrast to Husserl's reflective phenomenology, which Heidegger believed was entangled in the prejudices of traditional modern philosophy and was therefore focused primarily on perception as opposed to the fullness of engaged practical life, Heidegger’s hermeneutic phenomenology takes as its starting point the concrete involvement of what he called Dasein in the world as a significant whole. In response, Husserl claims that in order to comprehend Husserl's study of time, it is essential for knowledge to distinguish between reflective and pre-reflective self-consciousness. See (Zahavi 2010). (Zahavi 2010). Hermeneutical phenomenology is defined as a mode of understanding looking that is fundamentally distinct from Husserl's theoretical knowing, what is reified or objectified, including consciousness itself as an object of reflection. This is in contrast to Husserl's descriptive approach to phenomenology. Heidegger's phenomenology is hermeneutic because it interprets the pre-theoretical essence that belongs to lived experience by accompanying the sensation of enactment of living experience with understanding seeing. It is attentive to the issues that are important to us

as they come to light against the backdrop of lived experience, which is the most fundamental or initial event from which hermeneutic phenomenology develops.

If one adopts an ontological perspective on mood first and foremost, then our moods are seen to be the fundamental essence of what allows us to experience things subjectively in the first place rather than being possessed psychologically per se, derivatively from our experiences. (Clark et al, 2018). Adopting Heidegger's definition of mood, our moods are believed to go beyond our routine, or what he called, "inauthentic," existence in that they are ultimately accountable for our sensitivity to the outside world. As a result, it is believed that in order to comprehend our daily interactions with the world, to which we are exposed and out of which our experiences arise, an understanding of our moods is required, if not absolutely essential. Our emotions are intertwined within a wider emotional spectrum rather than acting independently of our actions. For instance, it is difficult to distinguish between the mood of anxiety and other emotions like guilt or fear, both of which are frequently mentioned as prevalent symptoms of mood disorders (Whalen 2016). (Fuchs 2002). Despite this, it is important to remember when studying mood disorders that capturing the core of one's lived experience entails more than just comprehending and depending on the ontological foundation of our observations. Empirical observation can and does play a significant role in connecting and comprehending the metaphysical structure of our whole and experienced experience, according to an epistemological perspective.

Section 2: a glimpse into realism, idealism and empiricism

The transcendental idealism that Kant and Husserl both profess to support seems to inevitably incorporate some sufficient type of realism,(van Marjik 2020). Transcendental knowledge, or metaphysical knowledge, is what Kant refers to as non-empirical knowledge. Kant's contribution was to demonstrate how there can be non-empirical (a priori) knowledge not about transcendent objects but about the prerequisites for the experience of natural, non-transcendent objects, in contrast to his predecessors who had thought that such non-empirical knowledge was possible for meta-physical, i.e. transcendent objects. Thus, for Kant, the transcendental ultimately refers to a school of thought that contends to demonstrate the objectivity of subjective modes of intuition and thought for all appearances of objects.

Husserl's phenomenological philosophy, in contrast, begins with a different set of issues. His goal is to prevent the unpredictability of empirical knowledge about any and all objects that appear to us as being distinct from or superior to consciousness. The phenomenological reduction that just concentrates on consciousness as instantly self-given to itself—reflection upon "pure" consciousness—makes transcendental or trustworthy knowledge conceivable. Such consciousness is not necessary and invariant in the same sense as Kant's pure forms of subjectivity because the contents are not constant across individuals and throughout time. An investigation into the structures of pure subjectivity can also be called "transcendental" in the sense of demonstrating the origin of our knowledge of objects that are transcendent to consciousness because Husserl also contends that all objects, as intentional objects, are constituted in and for consciousness.

Husserl also focuses on the prerequisites for the formation of these objects in his philosophical work because his philosophical interest is specifically in the structures of that awareness. Therefore, despite the fact that their definitions of the term "transcendental" are different, there ends up being a lot of overlap between his own transcendental aim and Kant's (Nenon 2008).

Section 3: phenomenology, a valid scientific methodology

The term "phenomenology," which derives from the Greek word "phainein," emphasises the attempt to characterise a phenomenon in the way that it reveals itself to the consciousness of the person experiencing it, rather in the way that it is thematized (Merleau Ponty, 2014). Human conscious experiences are worldly experiences, and these experiences have meaning because of the environment we live in and the interactions we have with it. The external and visible component of an aetio-pathogenetic environment or process (the disease) that, by itself, is not shown is what Häfner classified as a "symptom." On the other hand, a "phenomenon" is what manifests as what it is and comprises both the problem at the root of it as well as the symptom that denotes its presence.

The term "phenomenology" is frequently misapplied outside of continental philosophy when discussing many objects and areas of study, particularly when discussing human behaviour and the symptoms and signs that indicate an objective diagnosis (Fuchs). If one intends to comprehend (Zahavi, 2017), what fundamentally distinguishes our temporal experiences, any study of consciousness must, to some part, concentrate on the invariant structures of a subject's lived, and

frequently disturbed or abnormal experience? After all, phenomenology is the study of phenomena perception and its essences, including temporal (Husserl) and existential (Merleau Ponty 2014). (Heidegger). In this respect, phenomenology is more concerned with the how or mode of consciousness than the what or the content of it. Things and various forms of giveness can and often do appear differently to different people according to the circumstances, environment, and temporal context.

When studying things phenomenologically, we learn how objects appear to us and how those appearances connect, first and foremost, to the nature of the experience, in contrast to science, which aspires for proof, absoluteness, and a precise categorization of a certain object or phenomenon. According to (Merleau Ponty, 2014), the real should be described rather than imagined. The notion that science must transcend beyond the phenomenal in order to find the unchanging truth is, at best, naive. (Zahavi 2010.

Phenomenology strives to expose what is beyond the surface and goes beyond the study of subjectivity and superficiality. Heidegger makes the point that it is nonsense to believe there is something else underlying what we experience expect that is, our consciousness, if not our sense of being and existence. The experience is basically primordial in Heidegger's eyes. In other words, what the phenomenon gives us is precisely what makes the experience possible in the first place. A phenomena is not a curtain hiding the reality and the truth. However, there is a difference between a cursory examination and a more thorough, clinical one. Regardless of how it is examined, a thing remains essentially the same. Thinking differently is deceptive and blatantly incorrect, and as such, it undermines reality. Thus, phenomenology goes

beyond the realm of the visible and seeks to understand phenomena at their very core. Husserl devised this method, which has its roots in Greek philosophy, which built his episteme in moving beyond the doxa (opinion), which is based on how things are presented to a person in his or her day-to-day life. Science differs from common sense understanding in that it aspires to delve deeper into the inner workings of what is real. The challenge offered by phenomenology proper is to precisely characterise the uniquely human abilities that give rise to our ability to experience and know. Phenomenology therefore places more emphasis on the structural relationship between the mind and the outside world or environment than it does on the structure of the mind.

Even if there were as many phenomenologies as there were phenomenologists, there should at least be a basic component shared by all of them in order to support the use of the umbrella term. (Spiegelberg, 1981) Through decades of research, scholars have repeatedly held the position that phenomenology either lacks an identity or possesses an identity that is largely methodological. In the literature, concerns of subject matter pertaining to the identity of phenomenology are virtually invariably given a supporting position. Is there a phenomenological research programme? (Crowell 2002, 2007). Crowell's main objective is to demonstrate that phenomenology satisfies the requirements for being considered a legitimate philosophical study programme, a significant portion of his discussion is focused on proving the assertion that phenomenology does, in fact, have a separate identity. Crowell outlines three requirements that must be accomplished for phenomenology to qualify as a philosophical research programme (or what D'Amico refers to as a philosophical tradition), drawing on Robert D'Amico's book Contemporary Continental Philosophy (D'Amico 1999).

(1) The programme "needs an open horizon of questions, difficulties, and possible clarifications," (2) the programme "requires restrictions whereby others can arrive at the same conclusions from either defended or generically uncontroversial assumptions." (3) It "must also be apparent how to carry on and do what the 'founding' texts did" (D'Amico 1999, p. 252; quoted in Crowell 2002, p. 423). It cannot be limited to the "starting" texts alone. (See Fernandez, 2016)

The ability of Dermot Moran (2000) and Robert Sokolowski (2000) to create specific methodological commitments across a variety of phenomenological works is the main topic of Crowell's explicit references to these two authors. In addition to drawing criteria for defining phenomenology's identity. Crowell also quickly lays out his own criteria, where he adds some more insight into the topic of phenomenology. He asserts that both phenomenology and analytical philosophy "are separated from transcendental philosophy by a concentration on meaning" when referring to them (Crowell 2002, p. 438). The distinction between phenomenology and analytic philosophy is made at the level of respective conceptualizations of meaning. Crowell makes the case, drawing on the work of Michael Dummett (1978), that Husserl expanded the idea of meaning to include all intentional experience, but Frege limited it to linguistic meaning (Crowell 2002, p. 438). He asserts that both phenomenology and analytical philosophy "are separated from transcendental philosophy by a concentration on meaning" when referring to them (Crowell 2002, p. 438). The distinction between phenomenology and analytic philosophy is made at the level of respective conceptualizations of meaning. Crowell makes the case, drawing on the work of Michael Dummett (1978), that Husserl expanded

the idea of meaning to include all intentional experience, but Frege limited it to linguistic meaning (Crowell 2002, p. 438). He argues that the focus of phenomenology is this larger understanding of meaning, which Husserl referred to as the noema. He claims that "the reflecting theme of the phenomenological research programme" is "the structure of noematic meaning" (Crowell 2002, p. 440). If by "philosophical school of thought" one means a collection of philosophers who adhere to the same or very similar sets of doctrines, then phenomenology is not and has never been such (Luft & Overgaard 2011, p. 1). They immediately follow this up with a statement that echoes Spiegelberg's optimism, saying, "Yet the importance phenomenology assumes today would be inconceivable if phenomenologists had not shared certain methodological commitments as well as closely related ideas about the proper domain of phenomenological research" (Luft & Overgaard 2011, p. 1). They still emphasise procedure, but they also suggest a "domain of phenomenological study." What is this domain, though? According to Luft and Overgaard, the bulk of phenomenologists adhere to three "basic notions or fundamental paradigms":

(1) First-person perspective, (2) description, and (3) intentionality are listed in that order.

These will all be discussed in the parts that follow, framed by Husserl's perspective on phenomenology. (According to Luft and Overgaard 2011) it’s possible to argue that phenomenology has uncovered a brand-new subject domain with its own structure and guiding principles: the world of subjectivity and consciousness and its universe of experience, which Husserl memorably named the "lifeworld." The work of all subsequent phenomenologists must be located in the examination of this domain,

generally conceived, despite their numerous departures from and critiques of Husserlian phenomenology. (2011)

Phenomenology holds the conviction that the critical stance appropriate to philosophy requires a shift away from a simple metaphysical or empirical investigation of objects to an investigation of the very framework of meaning and intelligibility that makes any such simple investigation possible in the first place (Zahavi 2012, p. 2). In a nutshell, phenomenology is "a reflective exploration of those structures of experience and cognition that permit different categories of creatures to disclose themselves as what they are," as well as "the philosophical explanation of the diverse types of world-disclosure" (Zahavi 2012, p. 2). Here we discover that phenomenologists examine "world-disclosure" in general, encompassing the "structures of experience and understanding," in addition to subjectivity, the lifeworld, and the structure of their purposeful linkage (Zahavi 2012). See also (Fernandes 2016)

Section 4: Husserl’s basic phenomenology

According to Edmund Husserl, phenomenology serves as a foundation for all other disciplines by clarifying how we perceive the subjects of science and all of philosophy on a daily basis. The technique of Husserl's transcendental phenomenology, phenomenological reduction, is used to examine experience. This approach offers a description of the making up of deliberate experience. (Moran 2008). We can comprehend the structure of knowledge and experience of objectivity by comprehending the structure of purposeful experience. Husserl's approach has historically been criticised for producing solipsism.

According to solipsism, knowledge of anything that is not inside one's own mind is speculative; both the outside world and the minds of others cannot be known and may not even exist. Moreover, solipsism supposes the fact that “I cannot transcend experience, and experience must be my experience. From this it follows that nothing beyond my self exists; for what is experience is its states” (Bradley 1902, p.248)

Husserl's phenomenology can offer a thorough approach for looking into how senses are formed, what they're used for, and how experience and knowledge are put together. It looks into how scientific knowledge and common knowledge are formed (i.e. pre-scientific experience). Without taking a position on assertions concerning the existence of beings and objects that are transcendent to pure experience, Husserl's phenomenological study seeks to understand the world as it seems to us (e.g. the reality of the laws of nature, or if it really was a tram that I just heard passing my apartment). In other words, the goal is to look at how objects appear to us during our experiences. Therefore, Husserl's phenomenology is not restricted to any particular topic field; rather, its aim is to investigate our shared mode of experiencing and comprehending (Fink 1934). Analysis of the act of intentional experience and the sense (Sinn) of encountered objects therefore forms the basis of phenomenological study. Reduction is a particular type of "backwards-inquiring" approach used in phenomenological examination. According to Sebastian Luft, the reductionist approach "steps back" from the way we naturally relate to the world to the realm where the naturally experienced world is understood as a manifestation (Luft 2012).

Understanding Husserl's reduction is a challenging task. Straightforwardly describing the approach as "a long and tough

analysis," Zahavi (Zahavi 2003, 47). Due to how phenomenological (i.e., unnatural) a reduction is as a manner of relating to experience, a reduction is always particularly difficult (Bernet et al 1993). The issue of whether performing the epoché and the reduction is necessary for a competent phenomenological investigation and analysis has not only been debated within phenomenological philosophy. Additionally, it is a topic that has generated a lot of heated discussion within qualitative research. (Giorgi 2009) in particular has maintained that epoché and reduction must be used to support any scientific inquiry before it can claim phenomenological significance. Giorgi derives part of this assertion on concepts found in Husserl's works on phenomenological psychology. Although the epoché and the reduction are essential to transcendental phenomenology, it is far more debatable whether they are also pertinent to a non-philosophical application of phenomenology, such as psychology. (Zahavi 2021).

Section 5: idealism, realism and empiricism revisited

According to Aristotle's conception of reality, things that aren't mental have their own physical existence and are, thus, fundamentally autonomous. On the other hand, Plato's idealism asserts that reality is nothing more than a mental construction. Therefore, idealism holds that all physical things are creations from an earlier, non-dynamic form of consciousness. According to Merleau Ponty (1963), natural empirical science now accepts the viewpoint of the impartial observer, which sees matter and the human mind as components of nature. a hypothesis put forth by Thompson (2007) to highlight the significance of form. However, the question is how shape is constituted as an object for scientific

cognition?. How are we given it? This is a query for transcendental philosophy, according to Husserl and not psychology.

Husserl acknowledges that idealism is really a theory about how the intentional subject is receptive to everything and every notion. Husserl may be seen as more of a realist than an idealist, for instance, if idealism refers to knowing only one's own subjective state and realism is the belief that we are immediately aware of objects in the world, objects that are, with a fundamentally different kind of being than the mind. Whichever definition is used, it is obvious that phenomenologists oppose objectivism, or the idea that reality is what it is, regardless of our subjective experiences, and that our cognitive perceptions of reality are nothing more than a reflection of an already existing universe.

Husserl's approach to eidetic science and form of transcendental idealism focused on two elements. This was following Kant's lead in seeking to understand the nature of conscious experience. Prior to focusing on genetic phenomenology, i.e. the way our experiences develop and transform within a given environment

(1) Human subjectivity and how it creates or establishes a cherished, organised, and meaningful reality by bringing the experiential world into being via a mental process.
(2) The structures and relations of subjectivity that constitute the world view of experience are essential, unchanging, innate mental structures, are necessary conditions for knowledge and experience and their universality (Fernandez 2018).

According to Husserl, transcendental structures serve as the foundation for empirical structures. Despite the observed or empirical distinctions between us, we all share the same fundamental structures. The idea that various conceptions of time are based on the same transcendental structures of temporality can be used to explain how different cultures experience time as it passes through time. He put doubt on this universality by proposing the idea that the unchangeable structures of experience, including the temporal kind, were dynamically transformed under specific physical and psychopathological situations instead of as part of normal development.

Section 6: the historical foundation of time and reality

"When something is comprised of parts and components which do not exit, how can that thing contribute to reality?" (Aquinas, 1999, Lecture 15). Two questions arise initially when considering time: first, does it belong to the class of things that exist or to that of things that do not exist? Then secondly, what is its nature?

An analysis of the ontological foundations of time, might make one suspect that absolute time either does not exist at all or barely, and in an obscure way. While relative time is a spatial concept and temporality cannot easily be measured other than experienced by a differentiating observer (Vrobel 2008). One part of it has been and is not, while the other is going to be and is not yet. Yet time, both infinite time and any time you like to take is made up of these. One would naturally suppose that what is made up of things which do not exist could have no share in reality. Further, if a divisible thing is to exist, it is necessary that, when it exists, all or some of its parts must exist. But of time some parts have

been, while others have to be, and no part of it is though it is divisible. For what is 'now' is not a part: a part is a measure of the whole, which must be made up of parts. Time, on the other hand, is not held to be made up of 'nows'.

Again, the 'now' which seems to bound the past and the future-does it always remain one and the same or is it always other and other? An Aristotelian influence is pervasive throughout Edmund Husserl‟s writings on time. For Aristotle time was primarily a measure of motion and change. Aristotle: Physics (Book IV, part 10-13). Time moreover, to Aristotle, is "a number of motion fitting along the before-and-after," as stated in Book IV, Chapter 11 of Physics, "we judge the greater and less by number, and we judge a greater and less motion by time," hence time is a number.

Furthermore, since "we claim that time has transpired anytime we take cognizance of the before and after in a motion," it must fit along a before and after. Aristotle defined motion as the participation of a thing in the action of what it is to be it rather than simply a particle travelling from Point A to Point B. Due to the fact that everything in nature is either in motion or at rest, "motion [and rest] seem to be impossible without time," By extension, everything in nature must be in time; their participation in what it means to be themselves is being evaluated. This measurement is the basis for determining whether anything is swift, slow, before, or after. Simply put, the duration of the motion which is the event's temporal length measures it. Motion distinguishes time by enabling a before and after through change, but time distinguishes motion by giving it a length; this is how both temporal length and temporal order are achieved simultaneously: a dual measurement. The existence of time necessitates

both the existence of a counter and the counter's interaction with the counted. In the passage from him that was previously presented, he makes this point clear: "We say that time has happened anytime we take consciousness of the before and after in a motion. According to Aristotle, this "taking cognizance" is "the present."

Aristotle makes it plain that he does not consider the present to be a component of time but rather something that is both in and essential to time. If the now is destroyed while it is still existing, it will both still exist and cease to exist. However, if the now is destroyed in another now, it is no longer the same now. Aristotle similarly rejects the idea of the now always remaining, stating that "if being coincident in time, and neither before nor after, means to be in one and the same now, and if the things before and the things after are in this now, then the things that happened ten thousand years ago would be at the same time as the things happening today." By asserting that the present is something that is continuously carried along throughout our experiences, Aristotle breaks through this deadlock and says, "The now is manifest as the thing flowing along." Both that there would be no now if there were no time and that there would be no time are obvious. Aristotle because he says that "the now marks off the motion into a before-and-after" and that "time is a series of motions fitting along the before-and-after." There would be no before-and-after, and thus no time, without this marker, or divider, as Aristotle also refers to it. Additionally, this awareness of change needs to be dualistic. Remember that time is a measure of length as well as position, or of motion as well as motion itself. This calls for awareness of both the motion and the motion with relation to oneself. In order for time to be divided into a before-and-after, it is necessary to maintain both a constant awareness of change as well as a constant knowledge of one's

own past experiences and potential future events. Before and after are relative; they belong to the measurer of the motion rather than the motion itself. Time is measured as the extremes of a line rather than as the same point, which is both a beginning and an end. The now is just a separation between them that appears as dual awareness. Aristotelian time can be depicted as a series of continuous, overlapping intervals rather than a collection of distinct points along a line. The after is the following before, and the before was the last after (Glazebrook 2001).

The question: "how could the very first moment in time have existed if it must have already had something before it?" is a reasonable objection to this reading of Aristotle. Aristotle does not directly address this subject, but it is unlikely that he would take seriously the idea of a beginning to time because he has previously shown that time is continuous rather than discrete (Dimock 2002). As a result, time is infinitely divided (at least hypothetically). Time is determined by motion's duration and position along a before-and-after axis, according to Aristotle. By its very nature, this definition calls for both a measurer and a thing to be measured. The Aristotelian now also appears as one's ongoing knowledge of both the measured thing and oneself; it serves as a boundary between before and after. As a result, for Aristotle, a moment in time is not a geometric point without dimensions but rather a brief span of consciousness of a time that is already rich in the past and the future. For all his careful and analytical descriptions, with their spatial emphases, Aristotle says little of the working of the mind and how time operates, functions and is measured within this system

Augsitine on the other hand had another view: ‘It is in you O my mind, that I measure time…..what I measure is the impress produced in you by

the things as they pass and abiding in you when they have passed and it is present. I do not measure the things themselves whose passage produced the impress, it is the impress that I measure when I measure time. This that is what time is, or I am not measuring time at all. ’ (Confessions 1993,p.25)

Here Augustine describes the mental processes that enable us to recognise before and after, and therefore numerate motion which Aristotle failed to do. In order to grasp our awareness in terms of the past, present, and future, we must first look within. Where time extends is in the present. Husserl referred to the present as the "living present." In this view, time flows, with the present marking the passing of time. Being in the present moment, both physically and mentally. There is no past or future. Since time is constantly flowing away to the past and future, we can only speak of it when we are in the present. Otherwise, we cannot talk about how long something took to happen. The present is not a component of time, just like for Aristotle. Aristotle expressed duration as a discrete quantity by reducing time to the sum of all motions as countable integers. quantifying motion in terms of a predetermined unit, i.e. the entire movement, in order to count the seconds. But regular timekeeping cannot be viewed as time. Augustine notes that, independent of enumeration, we possess an interior sense of time. We carry inside us the past, present, and future. Time and my boyhood do not exist anymore, but my memory still contains echoes of both. Only its future likeness exists there, not my old age. Time can therefore only be found in the mind. Augustine defined time as the flow of time in the present moment, rather than as a protracted copresent quantity made up of an unrealized past and future. There is only what is present. However, the is no longer present is fading. It is always moving toward the "not"

right now! In this text, time only existing as an existent in the passage of time. This is how we internally perceive the passage of time. We gauge how much time has passed in our minds. As a result, it leaves a lasting effect on us there and there alone.

The resemblance created in memory extends in a way to the present, where the past and present are both present. Given that the events of the future have not yet made an impression on our thoughts, how can we discuss the presence of the future in the mind? Anticipating is how to achieve this. The mind anticipates, attends to, and recalls. Reading a book causes one to recall more and anticipate less. The mind anticipates, notices, and remembers. An experience carries the lengthenedness of time, which is perpetually flowing, through its content. The passage of time through the non-extended now is this content's passing, which keeps the mind always occupied. The present is alive because its contents are continually changing. Husserl's live present is continuously streaming, ongoing, and present. We have an awareness of Aristotle's before and after, which necessitates memory and anticipation, and this is the subjective basis of the mind. It is unclear in what sense Augustine reduces the past and future to their mental equivalents of the present. We do make predictions based on our prior knowledge.

There is a long and illustrious history behind the restriction of immediate experience to a fleeting present. The analysis of time-consciousness is a long-standing burden for descriptive psychology and epistemology, Husserl writes in the preface to his Lectures on the Consciousness of Internal Time. Augustine was the first thinker to deeply recognise the huge challenges this approach entailed and to battle with them nearly to

the point of giving up. That there are three times a time present of things past, a time present of things present, and a time present of things future might be correctly stated. These three do, in some way, coexist in the soul; otherwise, I would not be able to observe them. Time present of past things is memory; time present of present things is firsthand experience; and time present of future things is anticipation.

The Book of St. Augustine Chapter 20, Heading 26. (Gale 1968)
St. Augustine's observations, according to (Klein), primarily fall under the category of psychological fact. He is one of the few writers to recognise the impact of St. Augustine's writings on modern scientific psychology. We quickly come to the conclusion that we can only perceive or experience what is contained in a momentary present because Augustine made it abundantly clear that the present must be completely without duration and that our perception is limited to what is present, or to that which one can see, which is (Gale 1968). How is it possible for us to have such a thorough understanding of the duration of the events or processes we experience if our consciousness is limited to the fleeting present? This issue is addressed by Augustine in a way that takes into account how our memory and sense of expectancy interact.

Aristotle didn't explain how one develops an awareness of the past and future or how we grasp a moving object. He also didn't explain how the now is carried along as time moves in accordance with motion, differentiating between the now that stays and the now that departs, which corresponds to the various places making the motion. How do we hold on to something that is still there for us right now when it is moving? How long does the memory of an experience or event last? The impression that endures is still there. How may a present perception

result from a present perception of a present? Because the perception of an object involves the synthesis or connection of the temporally disparate perceptions we have had of it, Kant realised that we could not grasp an enduring object distinguishing it from its background without also grasping the background, i.e. the past for example. This means that we must have a grasp of its past perceptions. We must remember our previous views of an object as well as its present moment or position in order to fully comprehend its mobility. We must acknowledge that these previous perceptions are in the past and to what extent. Without order before or after, our sense of motion would not be functional.

The process through which we comprehend an object involves a problem with how we comprehend time. Each is a unique facet of the same subjective experience. According to Kant, a point of unification forms the basis of every perception. The combination of our perceptions allows us to have a more indirect experience of the stone than we would otherwise have. We have in reality determined the a priori foundations of the rule, which states that a synthesis through which we grasp and object must adhere to it. These rules are what they are because they specify how we must connect the experience and the perceptions that make up it in order to truly perceive the objects and their relationships, not because they exist before or separate from the experience. We must identify the a priori assumptions that underlie the experience and the mechanisms by which they are specified if we are to grasp how pure notions of knowing are conceivable.

The synthesis of perception is our capacity to link and integrate spatially separated perceptions that make up an object's intuition, resulting in a unity of intuition. The ability to momentarily discriminate between

sensations with distinct temporal locations and a fixed place in sequentially given time is necessary. Additionally, one must replicate the impressions or presentations, making co-presentations of the sensations that we must separate based on succeeding temporal locations. What has been created must not be viewed as something novel but rather as something that has come before and is related. It must not be viewed as anything novel, but rather as something that has already been realised. The re-production Kant refers to creates time by the differentiation of its moments. Without this type of re-production, we would continuously be exposed to fresh impressions. Without their reproduction, time would not be able to advance, making objective experience impossible.

A third function is necessary to produce time in the distinction of its moments. We must be able to tell that the stuff that has been copied is the same as the content that was previously provided. All forms of reproduction are pointless without the awareness that what we think now is the same as what we thought only a moment ago. Kant uses counting as an illustration. If one wants to know the total, going from unit to unit is not enough. The awareness that what we are experiencing, i.e., a new reproduction, is not new or past, refers to the awareness that what it generates or its content is not new or past. Reproduction must include modification as well as reproduction. It must give the content it creates some not-newness or pastness. This makes it possible to discern between time and the series of successive experiences.

According to Kant, time is the outcome of our deeds. Time is created in the succession of moments by the ongoing act of reproducing myself and the recognition of the reproduced. For Kant, everything that appears does so in time. We were only able to comprehend the fleeting

impression of the current instant. Everything we understand is dispersed through time. Reproduction creates time, which in turn creates the medium through which things appear. They must show up in order to accurately characterise remarkable experiences. However, how can the components of time, which are consequently earlier than time, appear? Husserl turns the relationship between time and appearance on its head. He views appearing as the cornerstone of our perception of time's construction and constitutive processes.

Section 7: Physical and objective time and duration

According to one of science’s most famous proponents, Sir Isaac Newton notion of absolute time was considered to exist independently of any perception of it. In addition, it was believed to move consistently at a given pace throughout the universe and to be both measurable and invisible. Newton believed that mathematics was the only way to fully comprehend it. Newton believed that absolute time was a distinct, independent component of objective reality that was not reliant on any particular physical event or even the combination of various events. In other words, Newton's definition of time as an absolute container did not allow for the idea of an observer perspective at any time, nor did it speak of any internal or subjective points of difference or reference. This theory was rejected by Einstein, who spatialized time instead. A multiplicity of times, flowing at various speeds and belonging to distinct systems of reference, are possible thanks to relativity, which does away with an absolute frame of reference and with absolute time. For Einstein, time could not exist without reference to the position of the observer. Time frames are observer-centered due to the relative placements of simultaneity and time dilation. By defining the present as existing solely

in our consciousness a manifestation that appears to have no physical counterpart, Einstein distinguished between objective and subjective time. On the other hand, quantum theorists acknowledged the observer perspective, but only to the extent that they take part in the measurement of an event, allowing for the creation of a private and personal now. In this way, reality is created. However, the internal subjective differentiation of the observer is dismissed as unimportant and irrational. That is to say, it is only important insofar as the experiment's questions are the outcome of a process of subjective judgement.

The ontological validity accorded to the various notions of time and the ensuing epistemological presumptions are fundamentally different from one another, depending on which position you take. The manner the ensuing temporal relations are described also varies between these ideas. In spite of this, challenging the reality of time is nevertheless a good and productive place to start an investigation because it forces us to be more specific with our assumptions about the observer-environment interaction. Is time actually real, or is it just a tool through which we learn about the world through experience? Is time determined by an a priori framework we place on reality, or can time be approached using the knowledge we gather from empirical studies? This argument states that since we initially learn about the universe by empirical knowledge, it is impossible to describe time in a non-circular way since the person doing the defining is always already a part of the thing he is trying to define, which in this case is time. Since we can only proceed from our own empirical knowledge of time, our access to a time which is independent of our empirical knowledge can only be obtained consequently via that empirical knowledge. (Vrobel)

Bergson and duration

The Oxford Dictionary of Music states that a melody is defined as a series of succeeding notes coming together to form a recognisable shape, embodying the idea of temporal unity put out by Husserl. Bergson also used the metaphor of melody to explain his idea of duration. It represents the notion of time as purely physical activity at its most fundamental level. In (‘The Creative Mind ’1946), Bergson describes how science overlooks the fact that time moves and that the flow of time escapes subdivisions when they examine time as an absolute, objective thing that they can dissect and measure. For Bergson, time is lived, and not measured. He describes it as "the form which the succession of our conscious states adopts when our ego allows itself to exist, when it refrains from divorcing its present condition from its previous states" in his debut book, (‘Time and Free Will ’1910). The philosopher says the oneness of a phrase in a tune is the finest analogy for the sensation of integration we get in such a contemplative state. (Husserl 1991) extends upon this and notes that, if we were solely aware of the present, it would be difficult to perceive time. There is always a must ‘past ’phase and a must ‘about to happen ’phase in any perspective of the present. This is what we know as the consciousness of time itself. (Husserl 1991)

Section 8: inner time consciousness: the basic claim of Husserl

Phenomenology offers neither metaphysical speculation about time’s particular relation to motion (Aristotle), nor the psychological character of time’s past and future moments (Augustine), nor does it offer any

transcendental-cognitive presumptions about time as a mind-dependent construct (Kant). Instead, it examines the essential structures of consciousness that make possible in the first place, the unified perception of an object that occurs across successive moments.

Husserl expressly favoured the potential of an intuitive presentation of succession, change, and persistence in his early writings on time-consciousness. He also argued that there is a distinction between actually experiencing change and duration as opposed to merely imagining or remembering it. (Zahavi 2003). Just as we can see an immovable pyramid or a bird's flight, we can also hear an enduring tone or song. But how is that even conceivable? According to Husserl's well-known argument, if perception had just been cognizant of the present, it would have been impossible to perceive temporal objects, succession, and change. We must recognise that since we are aware of succession and duration, our awareness is capable of encompassing more than what is currently available.

In Husserl's view, a "duration-block" is a temporal field that includes all three temporal modes of present, past, and future rather than a "knife-edge" is the fundamental unit of temporality, to borrow a phrase from (James1890). Husserl described this temporal structure of consciousness moreover, using three technical terms. There is (i) a "primal impression" that is specifically focused on the object's strictly constrained now-phase. The initial impression is an abstract element that never manifests by itself and is unable to give us a sense of a temporal object. The primal impression is accompanied by two additional aspects: (ii) a "retention," or retentional aspect, which gives us awareness of the object's recently passed phase and gives the primal

impression a past-directed temporal context; and (iii) a "protention," or protentional aspect, which more or less indefinitely intends the phase of the object that is about to occur and gives the primal impression a future-directed temporal context and a temporal structure.

Section 9: the structure of time

For Heidegger Daesin’s fundamental characteristic and mode of ‘being in the world ’is temporal. Having been thrown into the world however implies a past. Husserl on the other hand, persuades us that our impressions are where our sense of time is first constituted. Our impressions are the first phenomena that define and constitute our sense of time. However, they are insufficient on their own. If this idea alone is applied, we would only ever feel change, the ongoing modification of the present-day contents, not their disappearance into the past. Retained phenomena of a different kind are necessary for this. Our ability to perceive time comprises not only the ability to recall the past but also the ability to anticipate the future, in a protentional sense. (Zahavi 2010). A person anticipates the notes of a melody that she perceives to be familiar. One’s anticipation of what will happen next is realised only as the music progresses.

This idea is indicated by the relationship between expectation and anticipation, which Husserl takes beyond Augustine’s conception. Husserl informs us that we discover an anticipation, in terms of content that can be interpreted, and the ensuing apparent objectivity in our understanding of and relationship with the future. The contents that are interpreted are described by Husserl as "protentions." They seem to be the polar opposite of retentions in his descriptions. As a result,

protention also has a mediated intentionality, exactly like the retentional process, which is a "continuous continuum of retentions such that each later point is a retention of the earlier," producing a chain of retentions of retentions of the first supplied impression. But its serial process works the other way around. Just as every succeeding retention refers to the prior one in the same retentional series, every previous protention in the protentional continuum does the same. All of the latter are purposefully included in the preceding pretention. The succeeding retention subtly suggests everything earlier. As a result, the protentional chain, which is the opposite of the retentional chain, is a having-in-advance of a having-in-advance etc. of a future impression, whereas the retentional chain might be described as an already, having of an already, having... of an original impression. (Zahavi 2003).

In this sense, the stream of consciousness is not just a series of first-impression "nows." My conscious experience suggests that I am aware of what I have just seen, heard, or thought, which is referred to as a retention, as well as roughly expecting a continuation of what I am seeing, hearing, or thinking right now, which is referred to as a protention. Husserl's favourite illustration uses music: when we hear a melody, (Gallagher 2005) we are continually aware of the notes that have just been played, and they also arouse some anticipation for how the song might proceed. Thus, as a melody develops, we perceive it as a dynamic self-organizing process rather than a series of discrete nows. It is already evident that Husserl does not favour the Newtonian interpretation of time as a series of now-moments, moments in the past, and moments in the future that are thought of as "things," "containers for things," or "points on the imagined "time-line." On the other hand, he views the present, past, and future as how we perceive objects and

events as being now, gone (past), or still to happen (future). (Jacob 2019). For example, though I experience the event of the moon landing, the past is not some metaphysical container of which this is a part; the past is the mode in which the moon landing appears to me. Each now that becomes the past can accommodate multiple events at once since it is not time itself that the now and past are a part of, but rather the way or mode in which I perceive things to be temporal. These considerations of temporal objects and experienced time suggest that the course of our conscious life, which starts from the privileged vantage point of the now, but nonetheless takes place in interaction with the past and future rather than in isolation from them, is the necessary condition for the disclosure of temporal objects and experienced time.

Husserl's phenomenology of time-consciousness, however, is more concerned with the structure of the act of perception that enables us to perceive a temporal object as unified across its numerous moments than it is with this descriptive account of some of the fundamental characteristics of time's appearance and content. Even though our initial reflections on time are based on a series of subsequent events, a succession of experiences or perceptions does not constitute a succession of experiences or perceptions. (Jacob 2019)

Section 10: phenomenology and the natural attitude

It is not the purpose of phenomenology to evaluate or quantify phenomena in an objective way, or to investigate whether variations in perceived duration, for instance, conform to or deviate from some pretended idea of "real" objective clock time, which may be nothing more than a single "specious" moment in time that has just passed. In

contrast, in order to give a phenomenon meaning, as is the case with any phenomenological study, it is necessary to understand it from the perspective of the lived and conscious experience. (Husserl 1991). According to this position, it is through our experiences, rather than empirically through our senses, that we gain access to the world within and around us.

Husserl holds that there is no distinction between the subject that is empirically observed and the subject that is transcendentally conscious. It becomes clear what the difference is between conceptualising oneself as a knowing subject in a phenomenological sense and as a causally known physical thing that is a component of the empirical reality in a positivist sense. Thus, there is a distinction between being unconcerned with how things are given or known and taking the world for granted, including our own physical selves, and having a rigid orientation toward things based on how they seem and how we come to know them. The natural attitude is considered here in the first, while the phenomenological attitude is considered in the second.

In two different ways, Husserl describes the natural attitude. Firstly he says we find ourselves located in the world and we take the fact that the world is always there for us for granted (Husserl 1913/1962). In all of our endeavours, we commit to assuming the existence of things and the world. Second, Husserl connects the natural mindset by stating that we assert things and the world as present and real (Husserl 1913/1962). Thus, our participation in this process determines the existence and actuality of the items we encounter. Husserl is implying that our conscious activity and our capacity to construct meanings, organise information, and communicate thought are the fundamental elements of

being. (Husserl, 1950/1960). This epistemological point differs somewhat from Heidegger’s ontological view that Daesin merely exists first and foremost. Either perspective nonetheless, compels the phenomenologist to locate, reveal, or uncover this activity and to investigate its most crucial characteristics. A phenomenologist's goal is thus to demonstrate how awareness gives the world its current, plausible, relevant, enjoyable, or otherwise, ontical or "actual" meanings. It is crucial to both our perception of reality and the daily temporal flow of events in our lives that we have a subjective sense of time and an understanding of it. (Teixeira et al. 2013). Bergson's concept of memory and Husserl's act of retention are both examples of objects that people experience subjectively in the present. the point at which the present and the past meet. According to Husserl, things or objects are described by the descriptive science of experience in the context of how they are directly experienced, given, or intended. A lived through first person subjective experience of whatever is being experienced is where a description of a phenomenon starts. To suggest that consciousness is lived through is to imply that we are pre reflectively aware of our own conscious experiences simply by having access to them. In this view, reflection is simply the ongoing change of our thinking, and in doing so, our pre-reflective conscious experience of something is transformed into an object to support the reflective experience that occurs and which as a result is purposefully oriented toward it.

Husserl advocated a metaphysics of transcendental idealism in his quest to understand the fundamental components of consciousness and the circumstances necessary for the possibility of experience. In this way, phenomenology has its roots in eidetic science, which is the philosophical study of the eidos, or essence, of human experience and

existence. Human contingency, diversity, or particularity did not bother Husserl. He focused on necessity, invariance, and universality instead. But soon his phenomenology evolved into "genetic phenomenology," a systematic study of the genesis—that is, the beginnings and growth—of human experience. This novel phenomenology emphasises how our physicality and past affect how we perceive and comprehend our surroundings. While contingent structures are "empirical," necessary structures are "transcendental." Furthermore, and this is the key to resolving the paradox, the transcendental structures for Husserl serve as the foundation for the empirical structures. (Tassone 2017).

A detailed reading of Husserl's texts reveals how essential the reduction is for the defence of fundamental beliefs. The continuous relevance of Husserl's intentional act analyses for the knowledge internalism versus knowledge externalism issue is a valid one. This argument centres on the justification of knowledge and the justification of belief assertions. Husserl's approaches were not utilised in dealing with internalist versus externalist explanations of knowledge attainment until recently, despite the fact that the argument, in its contemporary form, dates back to the middle of the twentieth century. Following this, Husserl's approaches have generally been criticised by modern externalists, the majority of whom are not phenomenologists, as encouraging a rigid Cartesian internalist justification of belief assertions. In response, attempts were made to portray transcendental phenomenology as genuinely supporting epistemology

Despite the differences between the approaches, for Husserl we all share some fundamental experience-based structures. We share the same transcendental conditions that enable us to learn and use written

language, notwithstanding the empirical differences in the linguistic structure of our experiences, perhaps you understand Mandarin and I understand English. In the same vein, we may explain how empirically dissimilar conceptions of time (such as linear or circular time) are based on or made feasible by the same transcendental structure of temporality to resolve the seeming conflict between how various cultures experience the passing of time.

Section 11: epoche, and the process of transcendental reduction

Edmund Husserl (1859–1938) was fascinated by the epistemological question of how we come to have objective knowledge from the very beginning of his professional life. 2 Husserl's in-depth analyses of the connections between the acquisition of objective knowledge and ultimately subjective origins set his writings apart from those of other logicians or philosophers of the early twentieth century. In his early, epistemologically oriented research, Husserl examined the purposeful nature of mental states in the pursuit of knowledge. (Tassone 2017/ Brentano 1874). Husserl eventually came to radicalise his approach and expand his analyses to encompass areas like temporality, inter-subjectivity, and culture from within a "transcendental" phenomenological perspective. This emphasis on intentionality and the concomitant role of mental acts for presenting intentional objects was soon found to contain theoretical limitations.

To critically engage with the human sciences, it is necessary to challenge the conventional division between transcendental and empirical phenomenology, i.e., which is done via the reduction, or epoché. (Giorgi). In order to make the experiential world present, it is

first proposed that the human subject creates or discloses a lived, orderly, and meaningful world. Additionally, it is proposed that the mental structures that make up the world of experience in the human subject are fundamental, unchanging, or innate mental structures that are necessary prerequisites for the possibility of knowledge and experience.

The meaning of the Delphic adage "Know thyself!" has changed. A forgotten science in the world is positive science. To recapture the world through a global self-examination, one must first lose it through epoché. Augustine advises, "Noli foras ire, in te redit in interiore homine habitat veritas," which roughly translates to, "Do not wish to go out; go back inside yourself" (quote). Truth resides within the individual. Husserl claims that the phenomenologist can only learn the truth about intersubjectivity by studying a more basic phenomena like subjectivity. This conclusion to Husserl's examination of intersubjectivity may seem counterintuitive. The movement of moving "inward," wherein I expose myself to myself, is a revelation of the ego's core structure, or its "monadic" truth. The "Kingdom of immanence" refers to the idea that the inner world of the ego is not merely the domain of myself alone, but rather of myself together with the other.

Around 1906, Husserl invented the epoché or "bracketing" technique. To guarantee that the relevant thing is described exactly as is perceived, or intended, by the subject, any phenomenological description proper must be undertaken from a first person point of view. This can be seen as a radicalization of the methodological restriction found in Logical Investigations.

It has been debated outside of phenomenological philosophy as to whether performing the epoché and the reduction is necessary for a competent phenomenological investigation and analysis. It is a topic that has also generated a lot of discussion within qualitative research. 2019 (Zahavi). No scientific study can claim phenomenological significance, according to Amedeo Giorgi in particular, unless it is backed by some use of the epoché and reduction. Giorgi draws some of his arguments for this statement on concepts from Husserl's works on phenomenological psychology. The epoché and the reduction are essential for transcendental phenomenology, but it is much more debatable whether they are also necessary for a non-philosophical application of phenomenology, I contend in the current study as I analyse Husserl's theories. 2019 (Zahavi)

For these reasons, Husserl insisted (in Ideas) that the existence of the object(s), if any, fitting the content of the intentional act described must be "bracketed" in a phenomenological description proper. In other words, the phenomenological description of a given act and, in particular, the phenomenological specification of its intentional content, must not depend on the accuracy of any existence assumption regarding the object(s) (if any) the particular act is about. Because of this, the epoché directs our attention to the parts of our intentional activities and their contents that are independent of the presence of a represented object outside of our minds. In other words, all presumptions regarding purported biological, psychological, and neurological theories and causes are basically suspended during the data collection process, in accordance with the phenomenological principle of the epoché.

During a diagnostic examination, this type of evidence may not always be visible or instantly understandable by the doctor or the patient. Methodological presuppositions must be suspended in order to be really objective. This effectively conveys the distinction Husserl established between phenomenology and descriptive psychology. The Husserlian technique of phenomenological reduction or bracketing has been discussed by a variety of authors (Jones, 1975; Klein & Westcott, 1994; Osborne, 1994; Polkinghorne, 1983). Husserl argued that in order to successfully establish touch with essences, one needs to exclude both the external world and personal prejudices. It involves suspending judgement or bracketing specific assumptions about the phenomenon in order to clearly see it. How does the bracketing procedure work? This was described as a three-step process by Klein and Westcott (1994), involving exemplary intuition, imaginative variation, and synthesis. The researcher selects a phenomenon and visualises it in exemplary intuition. Then, using creative variation, he or she proceeds to generate examples of experiences that are analogous. Finally, synthesis of the relevant essences results in the integration of these variants. Husserl's work was described in two ways by Polkinghorne in 1983. A method of free variation guides the researcher to a description of the phenomena' essential or invariant structures, without which it would not be possible to study the phenomenon. The use of purposeful analysis then concentrates on the actual physical experience and explains how the specific experience is created. According to Osborne (1994), bracketing entails recognising one's preconceptions regarding the nature of the phenomenon and making an effort to put them aside in order to observe the phenomenon for what it truly is. Husserl wanted to achieve this by using intuitive vision to genuinely perceive things "as they are." With

thorough description, he aimed to demonstrate the completely immanent nature of conscious experience.

Section 12: self conscious and reflective experience

For Husserl, of all the things that can characterise subjectivity the distinction between being conscious of something (lived time) and self consciousness, implicit time, (Fuchs 2007, 2013), exemplifies not only our existence but our awareness of ourselves existing.

Husserl claims that the understanding of our innate self-awareness as a flowing, continual perceptual process is made possible by the genetic model of consciousness. We are not only aware of objects when we have this level of self-awareness. Our awareness of the consciousness that is aimed at them is likewise present in the background. The way Husserl puts it is as follows: "Awareness exists as flowing and is a stream of consciousness that appears at all times to itself as a flowing.

The retentional and protentional modifications of the impressions we receive are what cause consciousness to flow, as Husserl observed, and we must do the same to realise this. These changes give the impression that time and its contents are moving forward from the past into the future. These changes leave a trace on every instant of consciousness. Because of this, "all momentary consciousness... is... inherently a protention of what is to come and a retention of what has already transpired". The word "of" denotes the self-consciousness of this flowing because the retentions are a present awareness of what is flowing away, whereas the protentions are a present awareness of what is flowing towards one. As a result, whenever we look at an object, we are always

mindful of our current condition as well as our past, present, and future states. We are cognizant of the object during these states, therefore such awareness is part of our awareness of the object.

How our consciousness embraces more than what it is given at a given time, is one of the most intriguing questions pertaining to it. (Zahavi 2010). How can we be aware of what is past, present, or future, and what impact can this have on our understanding of mental health anomalies? Husserl presents the concept of an extended present, which is distinct from recalling or anticipating. However, without going backwards, how is our consciousness unified into many conscious phases. A fundamental impression, a retention, and a protention are all parts of the lived experience. Our memories are not stored as fading images in our minds; rather, they are imbedded in a temporal horizon. According to its still-intentionally-retained meaning, what came before will be preserved. It is a feeling. A perception is more than just an interpretation of the present. It has two phases: one that is just past and one that is soon to happen. Perceptual presence is not timely in a noematic sense. It is a field where the words right now, not now, and not yet are arranged horizontally.

In other words, the temporal structure needs time in order to exist. It also needs knowledge of a duration, duration, and consciousness of a succession, succession. How is the sensation of succession made possible by the synchronisation of these several subsequent phases? Are we going to propose yet another type of awareness to explain it? For the generosity of this time period and the unity that underpins and supports our consciousness? Husserl observes that the now consciousness is not itself now and that the flow of the modes of

consciousness is not a process. Additionally, the retentional phase, which coexists with the now, does not exist simultaneously with the now. The temporal objects and events that time consciousness is aware of are not in time with one another. The flow is comprised of the initial impression, retention, and protention. Husserl makes a distinction between these interdependent inner time consciousness structures AND the phases of temporal objects, or the now, past, and future. The ability to sense the past, present, and future is enabled by the union of these structures. The now is not the presence in question!

All three temporal modes are included in the field or dimension of experience known as inner time consciousness. I am unable to become present or absent for myself in the very field of experiencing that allows for presence and absence in the inner time consciousness dimension.

Three distinct layers of temporality are noted by Husserl.

1. The precise moment that the thing appeared
2. The deeds, senses, and appearances' impersonal, immanent, and prior-to-empirical times
3. The consciousness-forming absolute pre phenomenal (unexperienced) passage of time

Section 13: absolute flow and subjective time?

Husserl sought to provide a more systematic treatment of the role of subjectivity in constituting both theoretical claims (such as the origin of the laws of formal logic in pre-predicative experience), as well as the

essential role played by perception in establishing how objects and meanings are given in “intuitive” acts of fulfillment.
To be a subject is to exist for the sake of itself or to be self aware, aware of one’s existence and being and place in time. Rather than existing only when attention is paid to our conscious life, self awareness is a feature characterising subjectivity, whatever the circumstances. In the form of intentional life, an absolute existence exists that is simultaneously conscious of itself and all else it may be aware of. It always possesses the necessary ability to reflect on itself, as well as the capacity to thematize, create judgements about itself, and provide supporting data. (Zahavi 2010). Consciousness is consciousness, and every experience is consciousness. But each experience is also conscious to some level since it is experiencing itself. The awareness of the flow of life is consciousness. Both an inner perception and an inner consciousness make up our tacit self awareness, which forms the most fundamental basis of lived time and experience

Section 14: intentionality

Intention, according to Husserl, "means the mediation of consciousness, which is always intentional, always operating in the framework of intentions, and which, in the limiting instance, that of the final intention, is unmediated original consciousness." According to Husserl, the interpretative intents that guide the perceptual process are shaped by our protentions, which express what we expect to observe. Since time is the essential condition against which all conscious acts unfold, a pre-temporal vertical intentionality must naturally complement more horizontal intentional acts with the two seeming to working in tandem to

constitute the deepest level of human experience: absolute consciousness (Husserl, 1990/Tassone, 2019).

Every thought is focused on an external object. Consciousness is always extending or reaching beyond itself in the direction of something else. From a phenomenological perspective, it is possible to analyse both how this reaching out occurs and how the item enters our field of vision. Thus, everything is taken into account by phenomenology insofar as it serves as an object-for-a-subject. Husserl uses the term "intentionality" to describe our innate ability to be aware of something. Intentionality serves as the "indispensable essential idea" for phenomenology in Husserl's view. This intentionality is thus serial in character, much like the retentional chain itself. A retention's intentionality is partially satisfied by the retention it is "of," or the retention it maintains. The retentions that connect it to the original content, our consciousness, the very content that is present through these retentions, are what give it its ultimate fulfilment. Similar to this, a protention's intention is carried out by and via the protentions that connect it to the impending content. As Husserl puts it, the intention progresses towards continually fresh anticipations that are satisfied by moving from anticipation to anticipation along a continuum of anticipations. Here, we are dealing with two sides of a single process. The same pattern can be seen in the retentions, where both the intention and the retention are focused on previous retentions of the same primary data. According to Husserl, when an experience first starts, there is no retention of it and, as a result, no clearly established protention. Retention formation is the first step in the latter.

According to the static view of phenomenological science, we can see the intentional relation of consciousness to its object as a many-to-one relation, taking into account that there are many different perceptual experiences as perceptions of the same object.
Genetically, however, we have to think of the perceptual process as ongoing. (de Sousa 2017). In this isnstance, intentionality involves the expectation that, as one continues this interpretation, the object will expand itself until it satisfies the ultimate intention, in addition to the desire to interpret a series of events as experiences of a certain object. This emerging anticipation or propensity is a deliberate choice. While pretending, we focus more on some contents than others. We concentrate on those that align with our goals. This intentionality links the actual contents of the experience "back to what preceded," that is, to the retentions that served as the initial inspiration for our claims. Husserl therefore had a dynamic view of how a perceptual object appears. Using intentionality, Husserl explored and documented the essential {or 'eidetic', eidetisch - a word Husserl coined from the Greek eidos meaning 'essence' or 'form. With the aid of intentionality, Husserl investigated and documented the fundamental structures. In addition to the immediate perceptual objects of human sensual experience, these "things" also comprise so-called ideal and categorical objects and "objectivities" such as the conditions of the cat-being-on-the-mat. We are aware of ideal objects like numbers, propositions, essences, possibilities, and so forth in addition to actual objects. Additionally, phenomenological reflection can focus on consciousness itself and examine the fundamental characteristics of conscious acts (perceivings, judgings, imaginings, rememberings and so on). The unavoidable function of subjectivity in knowing must be fully understood if scientific and philosophical knowledge is to be fully grasped

Section 15: embodiment, volition and nature

Despite how crucial the dimension of time is for human cognitive function, little is known about its brain underpinnings. It is evident from examining the variety of occasionally at odds psychological and neurophysiological models that there is no agreement on how and where in the brain temporal information is processed (Wittmann & van Wassenhove, 2009). The pacemaker-accumulator clock concept, in which a pacemaker generates a series of pulses similar to a clock's ticks and the number of pulses collected over a specific period of time represents experienced duration, is the most influential model for prospective time perception (e.g., Gibbon, Church, & Meck, 1984; Treisman et al., 1990). An attentional gate may open when attention is focused on time in some variations of this cognitive model. Only after that do time units start to add up in the counter (Zakay & Block, 1997). This kind of concept suggests that an observer splits their focus between temporal and nontemporal processes (Grondin & Macar, 1992). The experience of duration lengthens as greater focus is placed on the passing of time. Duration is typically underestimated when we are preoccupied with other tasks and are so diverted from paying attention to time.

An approximately 24-hour-long endogenous biological clock regulates the daily rhythms of numerous biological and psychological systems (Roenneberg, Daan, & Merrow, 2003). Light-induced circadian clocks control physiology and behaviour throughout the day and allow an organism to anticipate and get ready for typical environmental changes. Circadian physiological rhythms are biologically based time units that define a day and influence human experience and behaviour (Wittmann

et al., 2006a). Notably, the circadian clock appears to be connected to how people perceive time for periods between hours. Human participants living in experimental isolation have shown that the creation of an hour interval is proportional to the amount of wake time, but the production of 5 and 10 second intervals was not found to be related to individual sleep-wake cycles (Aschoff, 1998). The structural and molecular characteristics of the circadian clock have long been known, and they are currently being understood (Merrow, Spoelstra, & Roenneberg, 2005). However, the neurobiological underpinnings of time perception and the capacity for anticipating interval timing with respect to durations of milliseconds, seconds, or minutes have not yet been discovered.

Our bodies are fundamentally physical, and as such, they are often investigated using the traditional somatic and material approach of medicine as well as the observation and measurement of phenomena. However, MP asserts that there is no clear distinction between personal space and intelligent and physical behaviour. (Moya 2015). This is how our body learns to comprehend the environment it lives in. (Refer to Gallagher and Zahavi, 2008)

According to Aristotle's conception of reality, things that aren't mental have their own physical existence and are, thus, fundamentally autonomous. On the other hand, Plato's idealism asserts that reality is nothing more than a mental construction. Therefore, idealism holds that all physical things are creations from an earlier, non-dynamic form of consciousness. In contrast, our perceptions are only ever provided to us from a certain interactive or conjoined perspective, according to Merleau Ponty (1945/2011), meaning that our perspective is always pointed in

some direction toward something in the outside world (Husserl 1991). From this metaphysical stance, we are limited to an embodied and situated relationship with the world, with no access to a pure and universal viewpoint. Perception would not be possible without a body in space. Additionally, the ability of the body to move about and actively explore space contributes to our capacity to see, encounter, and thus develop a sense of reality. Perception is enabled by having a body that is capable of self awareness, but this is only subjectively feasible if there is a body. As Heidegger noted, our basic mode of being in the universe is through our physical bodies, and our consciousness has always had an experienced, and so embodied, foundation. (Husserl 1991)
The body thus serves as an interface between the subject experiencing life and the outside world! (Fuchs 2015). In contrast to the objective and defunct natural attitude and the Cartesian dualism that separates the physical and mental aspects, Husserl's focus on intentional mental states sees the relationship between body and mind as having a counter part in transcendental consciousness or subjectivity, which is constitutive and fundamental à la Kant!

Husserl, however, argues that the point of departure is how we link to the world of existence, our experiences of it as part of our situatedness in physical nature, of which we are both physically situated and embodied as are others within a physico-spatial environment (Szabo 2015). Being intersubjective entails having both a way of existing as an object in the world and a way of existing as a subject for the world (transcendental subjectivity). According to Husserl, a historically situated, embodied transcendental subjectivity creates the world. There is a phenomenological interaction in embodied cognition! The items of the life world are always purposefully connected through experience and

embodiment. We cannot separate ourselves from our bodies, in Husserl's view. Due to the fact that both play a crucial role in the creation of the living world! The biophysiological body as a material body is not always the living busy! The duality cannot be broken down by this distinction between living experience and busyness, though. According to Husserl's theory of the unity of subjective experience and objective reality, the body is controlled by a transcendental ego that is not physically present and uses it as the location of its subjective perceptions.

Section 16: inter-subjectivity and mind world

Most mental disorders are more or less profound disturbances of intersubjectivity, which means we have acquired a habit of not responding in a flexible fashion to the social environment. It is not true that we can only infer how others are or feel based on a mentalistic understanding of hidden states or bodily signs or symptoms. (Fuchs 2013). We remain essentially, intersubjective beings living and interacting in an intersubjective world. It is complicated how the body and the intellect interact with and within an environment. It is useful to think of the body and mind as a single entity nonetheless, when trying to solve this issue. Jaspers thought that one way we did this was via empathy. The happiness or grief we perceive need not be analogously inferred; rather it can be shared. What we are faced with when we watch outer behaviour is not a body or brain. No, what we frequently encounter via a consciousness mode, is empathy. This enables us to more directly or indirectly sense the emotions and suffering of others. This gives us a certain kind of intentionality that has its own form or structure. In addition, subjectivity and the world are intrinsically linked, and since we

always interact with other people, subjectivity cannot be understood outside of this situational context. We can also experience empathy for others even when they are not there. The environment that we share with others might be perceived objectively and outside as well. However, something that can theoretically be experienced by others cannot be considered objective or genuine. The world is intersubjectively constructed, and as a result, our perceptions of it are shaped by our interactions and experiences with other similarly involved people.

Understanding how the mind and the outside world interact is essential to our comprehension of occurrences. As already mentioned, it is erroneous to think of understanding as residing within some sort of container, with the outside world serving as its external counterpart and its function being to manage mental representations of that environment. (quote) Instead, the mind may be considered to be much more open in nature because this is how it is able to interact and relate to the environment inside and outside of us.

Daesin is not immediately contained; rather, Heidegger observes, it is already outside, where it interacts with another being in the outside world. Daesin is still inside, to the best of our understanding, despite being outside and carrying an object. Heidegger refers to the concept of the intentional subject, subjectivity, or consciousness using the term daesin. This is meant to downplay the fact that we are already present in the world and active in it. As Merleau Ponty reminds us, conventional ideas of inner and exterior do not adequately capture this relationship: the world is neither totally within of ourselves nor entirely outside of ourselves. (Zahavi 2008)

When one talks about what makes up consciousness, they are not referring to the kind of mind that creates the world we live in in its own image or the kind of mind where mental images appear out of thin air or serve to mislead us about the situation we are in. Instead, the process of creating consciousness is dynamic, allowing for the phenomenological appearance of objects and their importance. It is a technique that enables anything to appear before or before something else that may otherwise have an impact on us. Naturally, our consciousness is involved in this process. Although they are fundamentally related, the intentional experience and the intentional object must be distinguished in a phenomenological approach to understanding consciousness and inner time. Although affect and emotion are the subjective components, they cannot fully describe the object/subject relationship or experience of perception. In order to analyse intentional objects, we must take into account the subjective counterpart of deliberate act. Husserl explains this relationship from a universal standpoint, showing how, for instance, our awareness creates objective unities of category.

The goal of phenomenology is not to comprehend or account for the subjective in and of itself. We must, of course, take into account the subjective experience that makes up the physical world that we share with others as well as all the different organising factors, mathematical models, social interactions, and biological, chemical, and psychological changes that are associated with a given state, both before and after it appears, and what this signifies and means. This will help us comprehend the temporal structures and experiential frameworks that various forms of appearance are tied to. According to epistemological theory, we may learn more about the appearance, which is fundamentally, both subjective and intersubjective in nature, in order to

gain knowledge about the world. This knowledge is not always to be found in sensory data discovered empirically through observation of objects in the natural world. (Fuchs 2015)

Section 17: the intentional arc and maximal grip

If the historical view of cognition and concepts is that they provide mental content for our perceptions and actions, then Kant's famous adage "Thoughts without intuitions are empty, intuitions without concepts are blind" comes to mind. What, in Dreyfus's opinion, explains why our actions make success possible? In other words, if our interaction with the world is essentially non-minded and non-conceptual, how can we know that we are reacting to a situation appropriately? How can we know how to respond appropriately in the heat of the moment? Dreyfus believes that our behaviour in the world is determined by the shape and manner of the reality itself rather than by a claim of notions and cognition. In keeping with this, he makes use of a non-conceptual method of knowledge that is founded in our motor intentionality, where the environment's external factors directly control how the body moves. This is a "world organised in terms of human needs, interests, and biological capacities without their minds needing to put a meaning on a meaningless Given," in (Dreyfus's 1997) words.

The intentional arc places these abilities in time-tested recursive action cycles. Dreyfus defines the purposeful arc as simply "the way our successful coping continually enriches the way objects in the world show up," drawing on (Merleau-Ponty 1945/2011). The purposeful arc is, in other words, a "feedback loop in which our actions and projections are drawn out of us by the important characteristics of the world and, in turn,

affect the way the world presents itself as soliciting us," The intentional arc, which is defined as a relationship between significant appearances and their disclosure as attained via repetition and practice, is summarised as follows. The application of concepts or the observance of clear standards for behaviour are not necessary for the success of this nonrepresentational approach of solicitation. Instead, we develop expert responses to a situation, what Dreyfus refers to as a "maximal grip", through a non-propositional motor intentionality mode. In this mode, a person improves their motor intentionality by intuitively picking up and responding to the meanings the situation offers.

The Maximal grip

Maurice Merleau-idea Ponty's of "maximal grip" (MG), which refers to the way we use our bodies to try to gain a better perspective in a situation, is crucial to Dreyfus' explanation of effective coping. In light of this discussion, I introduce the term "intersubjective maximal grip" (IMG), which refers to the way we engage with others by anticipating their actions and adjusting to our individual ideal positions. This is how the foundation of an ethical attitude develops, and it is woven into the awakening of the volitional body. Affection makes an initially lifeless object into a topic for experience and disease. Husserl compares developing a meaningful relationship with one's body to building a bridge between nature, which is connected to in this context as being physical and methodologically as empirical and spirit, matter, and reflection (Papineau 2009). residing in the area where Husserl believes one might find an ego and an ethical subject deserving of action, engaging in life, and making decisions with her will and free will. Husserl believed that scientific naturalism ignored the existence of the life world as a

transcendental structure of interpersonal knowing, without which science could not exist. (Husserl 1970). The life world is a natural presupposition of sciences, but scientific naturalism ignores the life world's existential and epistemological supremacy. (Moran et al 2013). The closest approach to pre and post reflective experience that a subject has is in nature. Here, according to Husserl, the relationship between the subject and nature can be seen as a question of realising that we exist as social creatures that interact in a world that we are essentially a part of. Before we are anything else, we are all ontologically experiencing objects or other beings in the world, existing, and interacting with other beings.

(Husserl 1991) claimed that the physical body, which is a pre subjective, lifeless object, manifests itself initially. In order for the subjective experience to develop freely within an intersubjective interaction, it is crucial that natural matter, or the body, and subjective comprehension of the lived body interact. We are unable to see ourselves at this primordial level because at the first level of engagement with an environment, the physical body is nothing more than a stationary object that is not yet fully created. This must develop as a result of a clinical practuce process in which one discovers oneself to be innately a part of being there. The link between this and the lived experience is established in this manner. From subject hood to living hood, the transition is triggered inside us, and this becomes a part of the continuing clinical practise dialogue between client and patient, reflexively increasing our relationship with nature. Husserl makes a distinction between the somatic body that objective nature is aware of and the actual lived body that is experienced and constructed subjectively and manifests as an ownness of body. The intersubjective healing process starts with the opening up of the primal

level, which provides a method of functioning self-realization and also serves as the bearer of its own sentiments and experiences.

Section 18: the ontological structure of mood

Unlike traditional cognitive science and behaviour, which often relates, more or less, to mood as a matter of faulty cognitive thinking (Beck 1975) or as some neuro cognitive dysfunction, Heidegger conceives of mood as ‘disclosive affectivity ’(Elpidorou & Freeman 2015); who’s see it moreover, as a primitive, precognitive mode of bodily existence. Too many cognitive theories theories of depression posit that people’s thoughts, inferences, attitudes, and interpretations, and the way in which they attend to and recall information, can increase their risk for depression and other mood disorders.(Gotlib & Joormann 2010) without any consideration of the deeper levels of consciousness and being that elicits such behaviour.

Heidegger refers to throwness or situatedness, being as a gestalt whole, and revealing what matters to us in the world are the three ways that Daesin is shown. We acquire pre-reflective and unthematic access to the world and to people through our moods. Heidegger specifically mentions the impact of anguish or anxiety, which informs us of our most fundamental form of life and the way we perceive the outside world. Instead of using our ability to reason or be conscious, we get grounded with the world from within our moods.

Heidegger nonetheless, due to his use of language often appears a little vague, and has come under fire for failing to make a clear distinction between mood, affect, and emotion. (2008 Ratcliffe 2011). In contrast to

Husserl, who believed that awareness is what permits us to create a sense of reality and being in the first place, our emotions help us determine how we make meaning of the world. While our moods help us feel grounded and in touch with the outside world. Our moods differ from our emotions and have different ontological effects than psychological ones. In accordance with positivist beliefs, cognitive science sees mood as an internal, subjective mental state that is a reflection of some timeless reality or an experience with and within an external situation and environment. Inferring one's mood in this method involves observing one's external behaviour, such as their facial expression. However, according to Heidegger, our moods are important aspects of who we are and how we perceive and comprehend the world around us. Our emotions, which pre-cognitively shape who we are and how we interact with others, are not somatic or cognitive side effects. Heidegger compares our moods to atmospheres, which are present without our intervention and of which we are a part. Nevertheless, they do not exist apart from us or outside of our being. They are merely and essentially present. Our fears are the most revelatory of our moods because they influence and control how things look to us. They provide a revelatory dimension. Even when we find ourselves in a certain mood, our attention is not on that mood as it would be on a specific affect or emotional reaction to something. Pre reflectively, we frequently experience moods without even being aware of them. Whether we are in love, bored, or simply unconcerned with a situation, we are in fact constantly in, or existing within, a mood of some type. Any type of theoretical, intellectual, or psychological disclosure comes after affective disclosure. We are able to make sense of the world and the lived experience we have because of our moods, which Husserl claimed to be our conscious experience. As a result, we can say that we love inside our moods.

Section 19: Mood, anxiety and cognition

The term cognition, which is derived from the Latin cognoscere, which meaning "to conceptualise," "to know," or "to recognise," is defined by Robinson et al. (2013) as simply "information processing." The ability to process information from the external environment and decide how to use it internally boosts adaptive power and reproductive success. A viewpoint that, despite being widespread, is an inherent flaw and, at best, an insufficient justification in the conventional approach of using natural knowledge to comprehend human experience. Robinson et al, (2013) refer to the structure or cognition by making a distinction between:

(1) sensory-perceptual processes (i.e., early processing and detection of stimuli); (2) attention/control (i.e., the ability to attend to some stimuli and ignore others); (3) memory (i.e., maintenance and retrieval of information); and (4) executive function (i.e., com- plex integrative and decision-making processes).

Perceptual processes happen quickly, mostly in subcortical and posterior cortical circuits, while attention, higher-order learning, and executive functions demand progressively more complex integration of cortically processed information. These functions are listed in order of ascending phylogenetic "complexity." Although there are undoubtedly numerous exceptions, the logical hierarchical structure is formed by these four main divisions.

Notwithstanding the aforementioned neuro-cognitive viewpoint, it can be stated more succinctly that there are specific, everyday reasons for the motivation of fear and anxiety from a cognitive perspective. These reasons are frequently attributed to loss of control, an inability to come up with a coping strategy, and the distinction between state anxiety and trait anxiety. Loss of control describes a condition in which one's life experiences unanticipated or uncontrollable circumstances that cause anxiety and/or depression. Feelings of powerlessness consequently emerge. Anxiety might be brought on by a task's potential for unpredictability (Seligman, 1975). Anxiety sensations are brought on by the incapacity or perceived inability to respond adaptively to a dangerous occurrence or by the knowledge or belief that there is no such reaction available. Because anxiety is so unclear, it is the main factor impeding the development of effective action plans to deal with the problem (Lazarus, 1991).

Section 20: Mood and biological anxiety

According to the biological viewpoint, overstimulation, cognitive incongruity, and response unavailability are the three fundamental circumstances that cause anxiety. When a person is bombarded with information, it is called overstimulation. Cognitive incongruity occurs when a person finds it difficult to accept an occurrence, such as the death of a loved one. When a person is unable to provide a response, they are in a challenging predicament.

According to the James-Lange Theory, physiological sensations like heart rate and blood pressure serve as the foundation for emotional experiences. When faced with a situation that puts one's survival in

danger, fear and anxiety can be an adaptive response. People go through a sort of fight or flight reaction. Emotional expression is mostly controlled by sensory feedback. moderate to mild anxiety It is evident that extreme levels of worry and dread can harm psychological health, cause errors in reasoning, and interfere with memory and focus. However, there is evidence to support the idea that mild anxiety may have an adaptive function.

Although popular theories (Damasio, 1996; James, 1884; Schachter & Singer, 1962) suggest a connection between the mind and body, substantial experimental research has revealed little correlations between physiological and psychological reactions to stress (Campbell & Ehlert, 2012). Instead, it has been suggested that anxiety feelings may be influenced by how people perceive physiological changes (specifically, how they perceive changes in HR) (Mallorqui-Bague et al., 2016). Clinical populations have provided evidence for this (Mauss et al., 2004; Schmitz, Blechert, Kramer, Asbrand, & Tuschen-Caffier, 2012). For instance, Mauss et al. (2004) discovered that while anxiety was unrelated to all real physiological responses, it was connected with perceptions of physiological responses (such as increased heart rate and sweaty hands) during a speech task (Mauss et al., 2004). According to a different study, people who were told their HR had increased expressed more anxiety and had more bodily symptoms of it, as judged by the autonomic perception questionnaire (Wild, Clark, Ehlers, & McManus, 2008). This result was constant in both the high- and low-anxiety groups, demonstrating that people who perceive more HR activity probably experience higher levels of anxiety (Wild et al., 2008). As a result, it might be argued that perceived HR, as opposed to actual HR, is more likely to be substantially connected with anxiety reactions to

stress. However, this hasn't yet been looked into in a non-clinical population. Interventions to reduce anxiety experienced during stress will be more effective if they are based on an understanding of the elements that greatly contribute to the experience of anxiety symptoms, especially in a healthy population. (Trotman et al. 2019)

In contrast Heidegger adopts a more philosophical stance in (‘Time and Being’ 1927/1996) when he distinguishes between dread and anxiety as part of Daesin's journey from commonplace fallenness to authenticity. Intentional directness is made possible by our attitudes toward Daesin. However, unlike worry, fear does not make Daesin's completeness apparent. When one is afraid, they are typically afraid of something inside. On the other hand, anxiety does not stem from within. For instance, Freud held that fear, whether conscious or not, was the root cause of anxiety. A phobia is frequently developed in order to escape anxiety. Unlike anxiety, fear is focused on a particular object. In contrast, when one has anxiety, they are concerned about everything at once and are unable to escape. Other psychiatric viewpoints consider fear and anxiety to be on the same spectrum, as is the case with comorbidity, linking fear and mood disorders like bipolar disorder or major depression, for example, where our fears and agitated and retarded states interfuse. Although the concept of internal unrest is obvious, Heidegger does not have this concept of worry in mind. Heidegger's theory of mood is frequently criticised by empirical research because to its ambiguity and challenges in identifying the underlying components. However, moods can show up ontically in our emotions as things that existed before the emotion. Empirical observation is made possible thanks to Daesin's attunement. Our emotions let us know what is both

missing and important, what matters and how it affects us. All of our potential is a result of our moods.

Benzodiapines, which include the anti-anxiety medications Valium, Librium, and Alprazolam, assist in controlling neuronal transmissions. This chemical is produced by the body naturally, although it has not yet been isolated. The ability of GABA to bind to its own receptor sites is increased when the benzodiapines bind to the sites (Tallman et al., 1980). Critical neurons in various areas of the central nervous system fire less frequently as a result of the GABA receptors opening chloride channels. The production or release of benzodiapines, which are required for the quantity of GABA required to control neuronal transmission, is impaired in those who experience anxiety more than other people. Benzodiazepines reduce anxiety while also promoting sleep, muscle relaxation, and a reduced risk of convulsions. Barbiturates, a different class of medicines, were once used to treat anxiety.

Section 21: Mood, affectivity and emotion

Heidegger holds the establishment's denial of emotion and affect as just incidental subjective phenomena to the cognitively objective and outside world in the highest regard. When Heidegger transmits the idea of a comprehensive background of caring, which forms our most fundamental design, i.e., our being in the world and all of our intentions and subjective interactions with others, he flips the ontological role. This represents the fundamental teleological aspects of our experience and the fundamental ways in which we perceive the world.

The idea of "care" is a state that, from a temporal standpoint, permits us to view the world as a whole and as a place of potential futures. In this sense, we are constantly focused on the future while being grounded in the past (facticity) and positioned in the present (fallenness) (projection). The word "care" is put before itself as part of its structure. (1962 Heidegger). In this way, our moods and emotions play a significant part in our actual interactions with the outside world, which cannot be reduced to theory.

As Heidegger intended, attunement effectively expresses the primacy of mood. For Heidegger, it illustrates how Daesin's entanglement with the contexts of the world—a world that is initially shown by a world of mood and emotion—is constituted by emotion and mood. In this sense, emotions and moods are not at all subjective because they are not reducible but rather exist before the theoretical development of the subject/object relation. Moods and emotions are not a byproduct of cognition but rather point to a more fundamental foundation.

Heidegger updates science's idea of emotion to portray it as a cerebral, disinterested, and uninvolved sideshow to other types of intellect. The positivist disciplines of physics, chemistry, biology, and even cognitive science, for instance, must presuppose an understanding of the world that our sensitivity to it reveals and within which we must exist. Heidegger emphasises this type of constitution and being, but he opposes the notion that science should cede its authority to our feelings and emotions. Even though they may contribute to undercut science's privileged ontological and epistemological position, feelings do not replace intentionality. As Heidegger puts it, certain emotional states might disclose disclosure, allowing us access to the outside world. He

emphasises that the most grounded of emotions is Angstbor worry. Heidegger hardly distinguishes between mood and emotion in this passage.

We are unconscious of our moods when we are in a healthier midstate. Moods are typically revealed to us before reflective thought and undoubtedly before any type of active cognition or volition, which is outside the scope of their revelation (Husserl). (1962 Heidegger). In this sense, it is impossible to evaluate moods objectively because doing so would need us to be in a certain mood. the most effective strategy to access our personal experiences is to focus on the first person perspective and how mood and affect are organised. Moods can interfere with our internal clocks (Fuchs 2005, 2010). For one reason or another, we can get out of sync with or separated from objective time. We can get overburdened, which can weaken our emotional support network and cause additional mood changes, such as feelings of isolation and indifference, as well as other physiological changes as bodily functions alternate between accelerating and stalling and lose their coherence and organisation. (Aho 2007). There is also the existential aspect to take into account. Temporal distortions caused by psychopathological diseases can limit our understanding of temporal possibilities. According to Husserl's concept of a temporal structure, we constantly switch between memories of the past and predictions of the future. In certain mood disorders, one may become mired in the past or the present. Ratcliffe (2015) and Fuchs (2005). This may have an impact on our sense of self, mineness, and identity (quote). Mood problems might diminish the significance we place on our lives. A variety of unwelcome aberrant events take the place of regular, everyday

experiences, thus limiting the future and imprisoning us in the past and present.

Section 22: Summary

Pursuing a methodology principally based on Heidegger's ontological and conceptual ideas of mood and Husserl's foundations of consciousness and time consciousness is the author's view the most suitable choice given the topic under study, the nature of the participants and their participation and the context of the experiences being analysed. The aim has been to remain as faithful to tradition as possible, to Husserl's notion of temporal structure and the psychological or scientific reduction that aims to support empirical observation. This is not a study in transcendental consciousness. Rather the aim has been to pursue a phenomenological, psychological and subjective account of temporal alterations in lived experience, as they relate to mood disorders. The proposed methodology has presented the key components of time consciousness and mood to help position the research ontologically and epistemologically, in terms of gaining a better subjective understanding, from a temporal perspective, what it means to experience a mood disorder

Chapter 4: Method

Section 1: a method of description

Karl Jaspers provided the most thorough historical account of psychiatry's theoretical underpinnings between 1913 and 1954 in a series of volumes. The text had little influence at the time on psychiatric practice and research in the English speaking world. His conception of psychopathology gave phenomenology, understood as a methodical investigation of the patient's subjective experience and point of view, a clear emphasis. The "conscious psychic event" was the subject of psychopathology at the time, necessitating a thorough investigation of both individual experience and subjectivity.

Since the release of DSM-III in 1980, and the introduction of a more strictly controlled operational structure, the basic behavioural criteria, or, most commonly, observable and reported signs and symptoms, have been used to identify psychiatric disorders. In essence, making a diagnosis according to the DSM-5 and ICD-11 diagnostic manuals involves determining if a sufficient number of criteria are met. In somatic medicine, symptoms and signs are viewed typically as epiphenomenal with relation to the actual sickness, which is often related to as some form of biological imbalance.

Section 2: empathy

The ability to mentally put oneself in another person's shoes in order to comprehend their feelings, point of view, attitudes, and propensities to act in a certain scenario is referred to as empathy (Gorden, 1969).

Edmund Husserl (1952) sometimes referred to it as ‘trading places’, while Alfred Schutz (1973) referred to a ‘interchangeability of standpoints’. This is of particular importance to the notion of inter subjectivity, as a shared interaction of experience. (Fuchs) The psychological concept of "empathy" is more frequently found today in therapeutic literature than in theoretical or methodological literature. In reality, many psychologists have utilised the idea of empathy to describe the clinician's presence with a client (Allport, 1937; Rogers, 1951; Sarbin, Taft, & Bailey, 1960; Wiens, 1976; Schafer, 1983).

Section 3: introspection and description

Beginning with Jaspers, and unlike in mainstream psychiatry, where diagnosis refers to a description of signs and symptoms, and where observation relies heavily on a behaviourist framework and introspection; phenomenology on the other hand, is seen as providing a different and yet empirically reliable description of human experience. First and foremost, phenomenology is not self-analysis. Rather than being opposed to introspection nonetheless, it offers a mechanism for recognising and outlining the fundamental characteristics of consciousness. However, this does not imply a return to introspection; rather, the emphasis is on how an experience is planned or brought into consciousness, as well as on making the procedure scientific and rigorous. Any reference to directly observing an experience does not necessarily imply a return to introspection, i.e., as a process of turning inward per se, (Thomason 2003), whether that is done via a first person reporting basis or by way of a third person. Rather, it refers primarily to the way the thing we are experiencing is provided to us via our consciousness. Concerns about the most effective way to accurately

capture the specifics of specific episodes of experience, however, have little impact on phenomenological reflection because it is more interested in fundamental patterns. Furthermore, many of the sceptics' objections to phenomenology assume an extremely objective account of experience, which phenomenology often rejects. The study's main focus is not transcendental philosophy, therefore the investigation of the fundamental causes of phenomenological scepticism has little to do, if anything, with concerns about introspection and similar issues. Instead, it entails doubts about the viability of that school of thought. The primary obstacle that phenomenology faces is proving the authority and legitimacy of its unique approaches in contrast to naturalism.

Section 4: first, third and second person perspectives

It is believed that first-person and third-person points of view or perspectives, which respectively correlate to knowing ourselves and knowing the world around us, are fundamentally different from one another. We frequently comprehend the distinctions between the two points of view in terms of how Thomas Nagel (1974) described them. Nagel made a point of our incapacity to have a first-person experience comparable to that of the bat by posing the question, "What is it like to be a bat?" Despite the fact that we have conducted third-person research (i.e., learned about the bat's echo-locatory system), we have been unable to fully understand the bat's first-person subjective experience, or "what it is like" to be a bat. When analysing how the two views are related, researchers frequently refer to the issue of "epistemic asymmetry." Metzinger (1995, p. 215, emphasis mine) writes: One of the basic problems in developing a theory of consciousness is the so- called ‘epistemic asymmetry. ’We know of conscious experiences in two

essentially different ways: through direct inner acquaintance, first person perspective and through access from the outside, i.e., the third person perspective.

The subjective and intimate interaction between the patient and psychiatrist must be taken into consideration during the diagnostic procedure if it is not to further dehumanise sufferers. Binswanger was the first to suggest that personalities need to be intimate with one another. As in traditional realism methods to diagnosis, the patient is considered as being significantly different from an object or research. According to this viewpoint, actual symptoms are reliably and subjectively described. Physical symptoms that are meaningless and unrelated to one another are not present inside of a person. (Urfer & Parnas 2017). Patients are complete individuals, thus a fast diagnosis should not be made just on their early complaints. An anxiety condition should not automatically follow from feeling anxious about something. Determining a person's psychopathological condition shouldn't be based solely on their current mood or facial expressions without considering the context, meaning, and other actual lived events.

A second person is necessary for the psychiatrist and patient to have meaningful interactions; a "I it" third party relationship is fundamentally different from a "I thou" relationship. Between the patient and the doctor or psychiatrist, there is a stronger sense of reciprocation, which leads to the emergence of a dialogue and communication. (Buber 2010). In addition, (Longo & Tsakiris 2013. (Stanghellini 2007) speaks of the need to comprehend rather than to categorise. He also makes reference to the notion of an intersubjective connection by connecting several

meaning perspectives. This clearly differs from the traditional clinician/patient interview.

Section 5: the interviewing standard

Structured clinical interviews have evolved into the gold standard in psychiatric interviewing thanks to criteria-based diagnosis. They often take the form of prewritten, preconceived questions that are delivered in a specific order. The majority of the research on psychiatric interviewing compares the relative efficacy (levels of sensitivity and specificity) and dependability of various interviewing techniques. The more fundamental theoretical question. What is the epistemologically appropriate method of obtaining psycho-diagnostic information, is typically usually not addressed. (Parnas 2007).

The interview guide for making the key DSM-5 diagnoses, though viewed as semi structured is called the Structured Clinical Interview for DSM-5 (SCID-5). A clinician or other qualified mental health practitioner who is acquainted with the DSM-5 categorization and diagnostic criteria administers it. The American Psychiatric Association published the Structured Clinical Interview for DSM-III-R1 in 1990 with the goal of improving the accuracy of psychiatric diagnoses. Since then, it has evolved with the DSM through numerous updates and additions. One of the most often utilised diagnostic tools in clinical research is the Structured Clinical Interview for the DSM. The psychometric properties of the current Clinician Version of the instrument (SCID-5-CV) have not yet been evaluated. 2019 Osorio et al. As stated by (First & Caban 2011) The Structured Clinical Interview for DSM Diagnosis (SCID) is a semi structured interview that is used to make the major DSM-IV Axis I

Disorders (SCID-I) and Axis II Personality Disorders (SCID-II) diagnoses. However, unlike fully structured clinical interviews (such as the Diagnostic Interview Schedule), the SCID cannot be conducted by lay interviewers. Since its debut in 1986, the SCID-I, the most extensively used tool for evaluating Axis I disorders, has been utilised in thousands of research studies. The goal of such a "quasi experimental" approach is not necessarily to engage in empirical control of subjectivism, but to minimise it, and thus to optimise inter-relator reliability. Although many interview tools frequently claim to be "semi structured" (Osorio 201) they are typically administered in a highly structured way.

However, the main object of psychiatry should not be optimise inter-rater reliability, nor should it strictly speaking have anything to do with blood pressure, body temperature, or a somatic examination of a broken limb, but instead it should regard the examination as that of an entire and unique person (quore). Here, the psychiatric "object" is different from that of the majority of other medical specialties. Just as studying brain cells under a microscope will never reveal awareness, treating people like mere things will never reveal who they are (quote). In fact, the notion that one must be objective in the realist sense of depersonalising the other into a "object" of study in order to have an unbiased scientific understanding of the other is a misconception that, as Laing notes, has nothing to do with controlled science The clinician must deal with both the experiences of the other person and his or her own experiences of that person because people are the centres of experience and the origins of acts that exist in social fields of reciprocal and intersubjective impact and interaction. (Fuchs 2013)

No matter how consistent, trustworthy, clear-cut, or scientifically designed the principles behind psychiatric structured interviews may be, they are still far too limited and constrained to adequately explain, describe, or comprehend the complex behavioural nature of bipolar disorders. Observing the kind of conscious lived phenomenal experiences that could aid in a deeper understanding of what it means to live with a bipolar disorder or kindred disorder is most definitely not an approach that is suitable or appropriate.

The difficulty in observing complex disturbances and connecting them to an underlying structure or causal pathway was highlighted by and for cognitive science. This difficulty was first noted by researchers like Carl Jaspers and Minkowski among others, and has since been taken up by writers and researchers currently investigating psychopathological disturbances (Fuchs 2013, Stanghellini 2016)

In a fully structured interview, the patient is asked pre-determined questions in a predetermined order, and the answers are rated as positive, negative, or threshold. The completely planned interview is predicated on a number of presumptions that must be rigidly fact-checked. A different strategy is provided by a conversational related, phenomenologically focused, semi-structured interview conducted by a reliable trained and experienced psychiatrist.

The "structured" portion of the "semi-structured interview" entails a list of items, which is often a compilation of pertinent scales. In order to assess these items once the interview session is over, the interviewer must elicit enough information (see EAWE below). The interview here, however, is conducted in more of a conversational style. The patient's story is

followed by questions that are contextually appropriate and follow it, but there is also always the chance to ask for further information or examples (this includes the possibility of a gentle interrupting and changing the direction of the interview). The patient's spontaneity, recall, and reflection are actively encouraged. Answers that are "yes" or "no" are never sufficient; instead, a patient's explanation must always be extrapolated before it can be used.

A clinical examination of bipolar and other mood related disorders from a temporal perspective provides an opportunity to examine the subjective structures that constitute and enable normal and abnormal experiences of time via our consciousness, following (Husserl) traditions. Despite being clearly obvious in the condition, present-day narratives tend to understate the effects of temporal disturbances in mania. They do not meet the DSM-IV, DSM-5, ICD-10, or the ICD-11 Beta Version's definition of a manic episode. Diagnostically important information only relates to how frequently and how long manic episodes occur and where they fall in time. Time lived is not taken into account. The disease, however, revolves around the anomalous experience of time. Manic episodes are a "manifestation of a mental sinking in time," as Eugène Minkowski had already observed (Minkowski 1970: 296). See (Moskalewicz & Schwartz 2020). Likewise in depression: people who are depressed frequently describe changes in their perception of time, with a common complaint being that time has stopped or slowed down.

According to reports, depression can cause a variety of qualitatively distinct changes in the way temporal experience is organised. Additionally, the disparities between these alterations, which are a part of a continuous spectrum, are not taken into account by the present

diagnostic categories, such as "major depression," or necessarily factored in by any standard interviewing technique, that might help address the question: what kinds of temporal experiences are related to depression specifically and potentially uniquely, is a good starting point for the research. (Ratcliffe 2012, 2013, Soreca, et al 2009)

Section 6: The Examination of Anomalous Self-experience

The Examination of Anomalous Self-experience (EASE, Parnas et al., 2005) and its supplement, as well as the Examination of Anomalous Experience (Sass 2003), are two of the most pertinent phenomenological interview methods (EAWE, Sass et al., 2017). Although they are fundamentally similar, the two relate more to changes that arise from and are tied to more worldly and external objects, with the former paying attention more naturally to disruptions in normality as they relate to the internal self. (Fuchs 2017). These interviewing methods draw on the Husserlian tradition and include historical accounts of phenomenological psychopathology

Due to their semi-structured architecture, it is possible to examine the patients' subjective experiences in-depth in relation to corporeality, temporality, spatiality, and intersubjectivity within a formally prescribed framework. This prevents the descriptive task from being entirely ad hoc, as the interviews include predetermined domains and items to direct the evaluation of the patient's experience within certain bounds and to predetermined degrees (Sass et al 2017).

The initial goal of the EASE and EAWE was to investigate and comprehend the experiential and behavioural characteristics of

schizophrenia spectrum disorders in individuals. These interviews provide in-depth accounts of ipseity or pre-reflexive self disorders. See (Sass, 1992; Parnas & Handest, 2003; Sass and Parnas, 2003; Parnas and Sass, 2008; Raballo et al., 2009; Fuchs, 2010b, 2013a; Sass et al., 2018). (Sass, 1992; Parnas and Handest, 2003; Sass and Parnas, 2003; Parnas and Sass, 2008; Raballo et al., 2009; Fuchs, 2010b, 2013a; Sass et al., 2018). EASE has been translated into more than 10 languages, including German, Danish, Spanish, Italian, and French. EASE and EAWE have had significant global impact on clinical practise and empirical research in psychiatry and psychology. EASE and EAWE represent characteristics of the patient's atypical experience that are valuable for both diagnostic and psychotherapeutic research, i.e., they can be used as tools in both clinical settings and in psychotherapy studies.

However, while the treatment of mental disease has made less progress, phenomenology psychopathology has concentrated exclusively on the question of psychiatric diagnosis. Only recently has research on mental disease treatment gained more traction, thereby affecting the practise of psychotherapy (Fuchs et al., 2019). A semi structural technique such as EAWE, which adheres to phenomenological traditions and Husserl's descriptive framework, offers the chance to conduct an empirical study of the relationship between the experiencing subject and the object of their experience from a variety of dimensions, including spatial, temporal, and intersubjective, and thus fits in with the dimensional approach to diagnosis. (quote). Particularly, the EAWE is intended to serve as a diagnostic tool to identify the essential qualitative and quantitative characteristics of different mood disorders as they relate to the material and outside world.

Time is a vital aspect of how we experience the world (EAWE), as well as how we perceive ourselves while we are actively experiencing ourselves in this world. (EASE). Despite the fact that mood-like characteristics are notoriously difficult to consistently identify since they can change, they are nevertheless an essential component of the same experience that must be recorded and reported. (quote). It's possible that different senses of anomaly are not limited to just certain illnesses. Time slows down or comes to a standstill is just one of the items on the list that shouldn't be used to describe specific symptoms. However, a variety of distinct phenomena could be linked to a single structural and temporal abnormality.

The experience of abnormal time by patients as a sensibility and as an objective phenomenon is one thing, but observing, analysing, and describing those anomalies subjectively, reliably, and phenomenologically while adhering to a designated and formal structure is quite another (Giorgio 2017). Clinicians must deal with both the experiences of the other person and their own experiences of that person because people are the centres of experience and the sources of behaviours that occur in social fields of reciprocal impact and interaction. Second person perspectives are key to establishing trust and an ethical balance in the relationship. (quote).

Part 2: the research process

Section 1: event and participation

For Husserl, (2008/1937), “natural cognition begins with experience and remains within experience” (p.5). So the naïve description is the first-person account of the experience as it was lived and understood by the participant in his or her everyday common sense mode of understanding. Since no other person can co-experience the subjective-psychological perspective of any lived through experience with the participant, the preferred “record” of such an experience exists within the consciousness

A review of theoretical perspectives in communication and Internet research identified “online participation” as one of six emerging global themes (Rice & Fuller, 2013). Rice and Fuller found that the number of articles addressing participation increased dramatically in the previous decade, in fact, among the six identified themes, the topic of participation experienced the strongest growth in interest. Motivation to engage in the research was a key factor reported by the participants.

A research event was set up by via a Facebook Page in early January 2022, which was created just for the research and include only information relevant to the research. It was advertised generally to anyone any age throughout the UK. During a two week period prior to going live, a number of research articles were posted online, on the Facebook page, highlighting and explaining various things to do with the research, to help potential participants understand more fully what the aim was and what was intended and help potential participants to

choose freely whether to engage or otherwise. The event went out live on the 14/1/2022. In excess of 100 people listened to the event live, after which around twenty potentially interested parties contacted got in contact.

Unlike quantitative research which requires a standardisation of procedures and random selection of participants to remove any potential influence of external variables and ensure generalisability of results, the choice of subject selection in qualitative research is more purposeful; participants within this context, were selected on the basis of their ability to understand, engage and likelihood to complete the process. Those whO had an understanding of the phenomenon under study were further motivated. (Cresswell 2009). Hence, one of the most important tasks in the study design phase is to identify suitable participants. I had several conversation with prospective participants, around six in all, before finalising the numbers. A number were unsuitable due to the degree of their disorder or because they did not seem to fully understand the responsibility and thus could not give their consent freely and untainted.

Section 2: sample size

The choice of sample size is important. It has to be sufficient to be worthwhile but must manageable too, in terms of the time scale and schedule of work involved. Whereas quantitative research requires statistical calculation of sample size a priori to ensure sufficient power to confirm that the outcome can indeed be attributed to the intervention, qualitative research generally and phenomenological research in particular, the sample size is not generally predetermined. Each participant was chosen on individual merits and treated as an individual

case. The number of participants depends upon the number required to inform fully all important elements of the phenomenon being studied. That is, the sample size is sufficient when additional interviews do not result in identification of new concepts, an end point called data saturation. To determine when data saturation occurs, analysis ideally occurs concurrently with data collection in an iterative cycle. This allows the researcher to document the emergence of new themes and also to identify perspectives that may otherwise be overlooked.in this particular lay case the six participants were interviewed three times each. Any more than six participants would have made the task of analysis more convoluted.

Section 3: informed consent

Informed consent (see appendix 1) is one of the founding principles of research ethics. (Byrne 2001). Its intent is that human participants can enter research freely (voluntarily) with full information about what it means for them to take part, and that they give consent before they enter the research. Consent should be obtained before the participant enters the research (prospectively), and there must be no undue influence on participants to consent. The minimum requirements for consent to be informed are that the participant understands what the research is and what they are consenting to.

There are two distinct stages to a standard consent process for competent adults:

Stage 1 (giving information): the person reflects on the information given; they are under no pressure to respond to the researcher

immediately.

Stage 2 (obtaining consent): the researcher reiterates the terms of the research, often as separate bullet points or clauses; the person agrees to each term (giving explicit consent) before agreeing to take part in the project as a whole. Consent has been obtained.

Section 4: operationalising the interview process

Due to the social interaction constraints brought about by Covid 19 and the fact that the participants were situated all over the UK, the research interviews were conducted by Zoom. Advances in communication technologies offer new opportunities for the conduct of qualitative research. Among these, Zoom, an innovative videoconferencing platform, which has a number of unique features that enhance its potential appeal to qualitative and mixed-methods researchers. See (Archibald et al 2019). Literature on the use of video and conference technology, also known as Voice over Internet Protocol (VoIP)-mediated technologies (e.g., Skype, FaceTime)—for online qualitative data collection is limited (Lo Iacono, Symonds, & Brown, 2016; Sullivan, 2012; Weller, 2017). Despite advantages including convenience and interactivity, qualitative researchers have discussed a number of ethical, practical, and interactional issues associated with the use of VoIP technologies such as Skype (e.g., Seitz, 2016; Weller, 2015). Typical issues associated with using Skype reported in previous studies include dropped calls and pauses, poor audio or video quality, and the inability to read non- verbal cues as a result of inconsistent and delayed connectivity (Deakin & Wakefield, 2014; Weller, 2015). As with comparable plat- forms like Skype, Zoom offers the ability to

communicate in real time with geographically dispersed individuals via computer, tablet, or mobile device. However, unlike many other VoIP technologies, Zoom possesses a number of additional advantages that enhance its potential research utility. A key advantage of Zoom is its ability to securely record and store sessions without recourse to third-party software. This feature is particularly important in research where the protection of highly sensitive data is required. Other important security fea- tures include user-specific authentication, real-time encryption of meetings, and the ability to backup recordings to online remote server networks (“the cloud”) or local drives, which can then be shared securely for the purpose of collaboration (Zoom Video Communications Inc., 2016).Secure data recording, storing, transcribing and processing was of paramount importance, as well as functional competence and practicality, in choosing the zoom platform

Section 5: operationalising the data collection

Three separate interviews per participant per participant were conducted using Zoom technology, and which were recorded between April and July 2022. There were 6 participants in total. The interviews lasted between 30 and 60 minutes. All participants were female, with the majority aged between 35 and 55 years. All the participants had reported, prior to the research beginning, various symptoms of bipolar or depression; and all participants historically had previously been clinically diagnosed with either bipolar or a similar mood disorder and were still taking some kind of medication as a result. The participants were located in the UK. The interviews were securely recorded using Zoom and once completed they were down loaded and kept in a research folder on my laptop. Nobody else had access to that lap top at any time.

The Audio (but not video) recordings were sent for transcription securely to an organised called: www.dictate2us.com. They were returned within five working days and returned to their original folder. No one else had access to the transcriptions during this process.

Section 6: ethical practice

Phenomenology offers an ethical framework that is ideal for mental health therapy by giving a variety of sympathetic instruments to observe, describe, and comprehend patients' worldviews. It can be used to determine the intersubjective relationship and, in a sense, clarify normality in a social and environmental setting. (Gendlin, 1961a). The diagnostic and therapeutic process is not solipsistic in character but rather intersubjective. Both the patient and the therapist participate in and help to shape the shared experience. Empathy is enabled and made feasible by open, trustworthy, and sincere involvement, free from erroneous diagnostic assumptions, being free of moral judgement, as well as having a sense of conscious knowledge and emotional responsibility. (Gendlin 1962). This helps to some extent reduce professional and cognitive bias that is brought about by traditional established rule systems. Conceptual bias only presents a limited shadow of the inner reality and conflict that envelops the meaning, in contrast to the richness of the felt and lived experience. Enabling a pre-conceptual flow of consciousness and emotion is crucial. It is not as important what this implies conceptually or otherwise to certain people. (Gendlin 1961a). The schizophrenia study used by Gendlin demonstrated the significance of understanding a person's circumstance from their loved body experience and doing so by going beyond only verbalising emotions and sensations empathetically. The philosophers

who have used Husserl's ethical framework to deepen their knowledge of mental illness and to hone their methodological approaches to clinical practice are included in Spiegelberg's (1972) book on phenomenology and psychiatry. Husserl, according to Ferrarello (2017), uses a pre-conceptual affective and emotional approach to perceiving the world empathically in addition to a well-reasoned one.

Chapter 5: Analysis, findings and discussion

Section 1: The Descriptive Phenomenological Psychological Method

‘The Descriptive Phenomenological Psychological Method’ was used to frame and analyse the data (Giorgio 1985, 1986, 1998, 2010). It provides a trusted five-step research system with Husserlian Phenomenology as its philosophical foundation, (Giorgio & Giorgio 2017, Englander & Morley 2021). This method was deemed valid because it has a phenomenological orientation at its core and has been specifically designed as a semi-structured format that offers both flexibility and control to capture anomalies. The majority of the questions came from within the EAWE guidelines. 2017 (Sas et al 2017, Fuch & Van Duppen). Giorgi (2009) had to adapt Husserl's technique for psychology because Husserl was a transcendental philosopher, aiming to analyse inner consciousness. In doing so, Giorgio’s (1985; 2009) five-step method offers the systematic rigour of "science" without treating the subjects of the study in a reductionist manner. Admittedly, the approach is more discovery-focused than verification-focused, for scientific purposes.

Section 2: trusting the data

When a scientist trusts, he trusts the data first and foremost (Luhrmann 2001). This is the conventional perspective on evidence. As a result, scientists are frequently taken aback by psychiatric descriptions. They think that data analysis needs to be expanded outside the person in order to find testable, generalizable independent positivist proof. Unlike quantitative analysis, qualitative research aims to contribute, as (Jaspers 1912) put it, to a more "genetic form of understanding," as opposed to a "complete proof based static explanation." This requires empathy and knowledge of the value of second-person interview perspectives. In this

regard, psychopathological research differs from quantitative research in the nature of the methods used to choose participants, analyse data, and ensure rigour.

Through the development of specific themes in relation to the selections of individual subject statements, the aim was to optimise evaluation of the degree to which the statements exemplified a given theme, and to help to uphold theoretical neutrality and avoid individual bias. The use of an iterative process to examine specific aspects of selected statements, including identifying with the relevant themes, as per the overall description, ensured the research analysis adhered to the original narrative structure, to enable it to remain line with the thematic structure that emerged.

The significance of natural science is not diminished by this, though. Jaspers believed that mental diseases were at the nexus of subjective experience, genetic, neurological, and everyday social and cultural contexts. In other words, because they are dynamic and complicated, mental diseases first affect people's consciousness and emotions before having any noticeable effects on their cognition or behaviour. Heidegger and Husserl

Section 3: observation of data

Observation of anomalous events is in this context, limited to and accessed by what is present in one's consciousness, a process which has no equivalent in somatic medicine. Unfortunately, despite being innovative at the time, Jaspers' ideas did not fully understand how a phenomenological style of analysis is carried out. Husserl had not

developed his process of reduction at that time. Although Jasper's goal was to theoretically explain descriptions, he soon realised that he couldn't do so because the notion already gives the means for completing the description. Husserl emphasised the importance of focusing on the basic building blocks of consciousness, experience, and existence as a solution to this issue. He believed that phenomenology was fundamental to human experience and served as a way to get back to the objects themselves when one went from conscious experience to concept level. Various organising structures that the human subject brings to the cognitive process are understood as enabling the perception of objectivity as a function of the human subject. Thus, phenomenology was shown to be more than just the study of abnormal experience; it is also similar to psychiatric, neurological, and other therapeutic studies that provide insights into emotional problems. (quote)

Although Jaspers provided phenomenological explanations of unusual subjective experiences, he did acknowledge that "psychological phenomena" or "psychic events" must also be researched using techniques for behavioural description and other performance measures, all of which must be taken into account in their causal relationship with neural structures and other biogenetic processes. However, as he himself noted, psychiatrists are never interested in brain events in and of themselves; rather, they are only interested in these events in relation to causation with what happens on the conscious level. Because of their connection to mental experiences that can be reliably detected based on prior experience, brain states only have the significance they do. According to Jaspers, a phenomenological comprehension of the lived experience must always come before a clinical diagnosis. Step by step

caution is advised, and one should not make snap judgments or explanations.

Section 4: analysis of the data

Phenomenological research always begins with a description of an experience that can be understood psychologically; in this case, I refer to an anomalous experience of time. Time here is understood to be subjective in nature. The description of such instances was obtained by means of an interview; in this case, a semi structured interview. The purpose of the interview is to have the participant describe in as faithful and detailed a manner an experience within the context of a situation or event, within which the experience took place. Not to describe the event or situation per se. The transcription of the interview, precisely as it emerged, was used as the raw data of the research.

To remind readers of the different stages of the analysis: firstly the whole transcriptions were read through as a gestalt and situated description, assuming the attitude of the scientific phenomenological reduction. Having read the descriptions, the parts are delineated to meaningful units. These are described as a psychological perspective mindful of the topic under study. And mindful of the transitions, the meanings are experienced and better understood, having read and re read the data. Prior to the creation of a structure being established, the transformed meaning unit expressions, as the basis for describing the psychological structure of the experience

The determinations of optimums and concordance by the relating to calculations of variation, in line with the, psychological reduction, as well

as adhering closely to the structural themes that emerge, and to the alterations of one's perspective, as a means of deriving the most essential description and to establish a measure of understanding and validity, and in doing so, overcome any limitations that the descriptions of the participants 'experiences initially posed. (Turleybetval 2016). It's is not a priori certain that their experiences of time are psychologically equivalent to their everyday understanding of it. (Giorgi & Giorgi 2017). Finally the most essential temporal anomalous aspects of the experiences, in line with the psychopathological and psychological context of the study, are considered in line with a Husserl's view of normality and abnormality and in particular concordance (Heinamaa & Taipale 2019). (See also Merleau Ponty 1995). This information remains largely unreachable from a third person perspective. The establishment of a subjective structure of meaning allows us to consider what it is like for people suffering from mood disorders to experience the world from a temporal perspective, (Fisher 2014), following in the footsteps of Minkowski, Jaspers, Binswanger and others, whilst remembering that the psychopathological is not merely a matter of measuring abnormal experience, as a deviation from a sense of normality. Anamolous ecoereimcesvof time can also be understood essentially as establishing their own kind and sense of normality, from an existential perspective. Any sense of abnormal experiences is not viewed here as being artificial

The analysis was done in accordance with the guidelines set out in (Giorgio & Giorgio 2017):

Step 1

Immersion in the specifics as they relate to a specific event-related description as a whole, to get a sense of the entire character of the experience being subjectively experienced and described. See appendix 4

Step 2

Adopting the phenomenological psychological attitude and the practice of the epoche and the suspensions of beliefs and the natural attitude, means putting aside the idea that all things can be explained by the physical causes of natural science, in the search for meaningful descriptions (Giorgi & Giorgio). In this instance, it refers to reducing the subjects of conscious experience of time to a broad psychological explanation of the experience under investigation, as it currently appears to manifest itself. At this point, there is no assertion of epistemological knowledge or ontological validity. The main objective is to identify significant units that relate to the event. To accomplish this, a more in-depth analysis was conducted, and parts of descriptions were given more specific meaning and attention, and, after reading the transcript descriptions again, psychologically significant aspects of the temporal experience were correlated in a second person sense with that of the researcher.

Step 3

Because the descriptions were quite lengthy, they were divided into distinct sections. In this step, meaning units are transformed into psychologically sensitive expressions (Giorgio & Giorgio 2017). See appendix 5. Meaning distinctions intended to be psychologically pertinent with regard to the issue under study. Aspects of the participants' reality are gleaned from the common expressions recorded in the original data. In relation to the subject being studied, these must be made psychologically explicit. Any personal relevance is viewed as having contextual worth first and foremost, as well as psychological phenomena and the meaning they carry

Examining the essence of a mental experience, whether it be a straightforward mental act or understanding the structure of time created by consciousness itself, is a key component of essential and eidetic variation. The goal is to identify the absolutely necessary and unchangeable elements that define the mental perception. Eidetic variation is a technique used to do this (Drummond 2009, Zahavi 2010).

Husserl believed that variation began with the intuitive selection of an example of the phenomenon under study as one potential variation among an infinite number of alternatives. Until a variation is generated that changes the phenomena into something else, the process will allow objects to appear as instances of the same phenomenon. When one establishes a horizon within which the item can vary without losing its identity as a thing of that sort, they arrive at a key understanding of the

structural invariants, which is to see the essence of the phenomenon (Husserl 1970, Zahavi 2003).

In quest of the core of a particular experience, free creative variation is a dynamic process. For instance, changing a specific dimension of a temporal experience entails asking whether the experience is shorter or longer than usual, whether it has ended, etc. This aids in determining what the fundamental structure may be that underlies an abnormal perception of time associated with bipolar disorder (BD), such as how it differs from a typical lengthening or shortening of time, or from an experience of mania or unipolar depression. (quote). More so than in the initial conscious experience, the experience's key components are detailed in detail, along with its primarily dynamical elements and how they relate to one another so that the temporal distortions can be more clearly perceived and comprehended. As a result, when a participant repeatedly mentions being in a "relationship" (a major topic), the meaning for her is psychologically elicited in terms of the importance of relationships in the description of the experience throughout the interview. A shift in the definition of relationship to "togetherness" clarifies the sensation of losing it and enables us to understand what it means to the participant. The purpose of this transformation is to create a psychological structure that maintains the original description while also adding psychological sensitivity to the phenomenon under study. Transforming a given number of meaning units in this sense entails determining such a structure. This does not include faithfully reproducing the original experience, but rather bringing it to light in order to make it more visibly obvious. In 2017 (Giorgi et al.). Thus, a description of the first person event as it happened in the third person is produced. To determine what is genuinely important and significant to the experience,

in this case time, and the most pertinent and consistent features that clearly explain the participants' relationship with it, an imaginative variation approach is used. Not every meaning unit is altered. This depends on how mentally wealthy they are.

Step 4

The determination of the subjective structure, see appendix 6, means that the meaning derived from the disclosures of the participants ' experiences are expressed with further and heightened psychological sensitivity, of time related anomalies. What is truly essential to an understanding of the experiences is sought through a process of imaginative variation. The purpose of which is to carefully describe what they mean in each case to the participant.

When considered collectively and generally using a comparative technique, the researcher synthesises the overall structure of the lived experience from the participant's modifications (Giorgi, 2009).

The experience is generally organised as a descriptive paragraph that analyses the lived experience of the research subject from a psychological standpoint. The fifth stage of the analysis involves synthesising the experience's psychological components into the overall psychological structure. Constituents differ from the concept of elements since they are context-dependent (Giorgi, 1985). As a result, constituents are required to be a part of the complete system and cannot live independently of one another. This technique is based on the notion of parts and wholes in phenomenology. Plato and Aristotle, not phenomenology, invented the concept of parts and wholes, claims

Sokolowski (2008). But the expression implies that not all things or circumstances can be comprehended solely in terms of their constituent pieces. Or, to put it another way, the value of the whole is greater than the sum of its parts.

Finally, it also can help the researcher to determine if there emerges a structure among the participants that is different than the others. This is significant because it shows how we can categorise a type of experience in a way that is perceived differently and may be categorically distinct. Furthermore, the variations in the structures that form would shed light on how and why psychological experiences were phenomenologically distinct even though we frequently thought of them as being the "same" in the natural attitude. Although it wasn't always the intended study's objective, to achieve for a broad structure of the experience to emerge. The descriptive phenomenological approach is a method in the mode of discovery rather than validation, therefore it would not constitute a failure of the method or the study to find that multiple general structures of a sample of participants were different. (Giorgio et al 2017).

Section 5: the findings

The analysis of the data followed the following structure: first, a general description is given of one of the participants, who was chosen as it exemplifies the difficulties and contentions that often arise when diagnosing mental health generally and mood disorders in particular. Carli has been diagnosed with Borderline Personality Disorder ’(BPD), although she reports consistent symptoms of bipolar and even unipolar depression. This is followed by descriptions of her experiences, which are confined to the EAWE domain of ‘time and events ’and ‘atmosphere

and attunement', which is a domain confined to a sense of dissociation and background mood (Heidegger). From this a number of temporal and mood themes were chosen that emerged from the various iterations that were followed, using (Giorgio's 2017) descriptive phenomenological psychological method, themes that were common to all participants. This was followed by identifying with a number of apparent differences between the different participants 'experiences. Finally, some similarities with particular temporal distinctions are described.

Section 5(i) background and history

C1 is a young woman in her mid twenties, who reported having had various anxieties and depressed or manic experiences throughout her life. C1's mother has reported some family history, with mania or bipolar and possibly drug abuse and schizophrenia (father), although it has not been clinically diagnosed, and C1's mother's brother is suffering from really bad depression, just like C1's grandmother. C1 has struggled since a child emotionally. She has always been OCD. She hated school, always had sleeping and eating disorders. C1's mother states that C1 has always reported bad thoughts. C1's mother had been trying to get some help since C1 was 15. C1 has been violent in the past and tried to stab her mum. She describes C1 as being '5 different people in one day.' C1 has a substance abuse history, as well as a history of anxiety and self harm. She's also been prescribed a mixture of drugs including Zopiclone, diazepam and a range of sleeping tablets, which dramatically affected her behaviour, so much so she started hallucinating and was apparently like a zombie. C1's mother also explained how C1 'flips and falls apart 'when her mother is not at home, and so she finds it hard to go on holiday for example. Her grandmother would have to go around

and wrap her in her Mother's blanket to calm her. C1 has a history of being emotional and being unable to fit in and accept what she has, although she reports that she appreciates it, but her head just 'distorts'.

Section 5(ii) time and events

The questions were framed in conjunction with the guidelines outlined in the EAWE framework for both time and events and atmosphere. (Sass et al 2017). (See appendix 2 and 3)

When asked about her past, C1 first states that anything under eleven years of age she can't remember. When asked about a past event or situation where time has disturbed her she says: "I can't access that part of my brain." She says also that "I can't really see any issues that I really struggle with apart from emotional and my feelings and relationships". C1 also reports a spiritual connection….?

Asked about the way she organises time, C1 reports a disturbed sleep pattern and often going to bed and getting up very late and not wanting to eat when she does. These symptoms tend to cause her to become anxious about a variety of things in terms of what she would need to do in the morning, (future), both at night and in the morning. This would then elicit depressed states of apathy. "I feel like one bad thing happening, and just like I feel like the world's crumbling." She also ruminates and fears death, her own, as well as her close friends and family, and being left all alone in the future. "My mum could go out tomorrow and anything could happen." when asked about time flowing smoothly, she describes time as switching between too slow and too fast, "I'm just waiting for the day to just end, and then in some days, the

time would just go so quick". She believed that these experiences were related to what time she got up and how much sleep she had had…a vicious circle? She reports getting very excited, (anticipating the future) about her social / night-life, although becomes anxious when plans change unexpectedly. She reports that memories of the past flood back, triggering emotions, and then she struggles with thoughts about the future. She returns to the experience of her relationships, reporting that she can't understand why perfect relationships should end, why the future is so empty when it happens. "I wouldn't even say time healed….because I wouldn't say I'm over that boy that I was in love with three years ago…..time doesn't heal things for me." She reports constantly thinking about and living in the past. "I also think to myself if that didn't happen, this might not be happening now." She reports that the future is very important to her chances of happiness, especially her chance of finding a happy relationship. When asked to describe herself she describes herself a bubbly and confident (especially on a night out), I like to take pride in my appearance and that she is a good person, having changed so much over time. However behind closed doors she describes herself as being depressed and lonely, isolating herself. She's not the person people see on a night out. She again refers to her relationships as stimulating this, saying that she started to look at the future, too much so in fact, and now she has to get used to how it's going to be. It's a shock to her system, when the next minute "it's not going to happen now and the future is just gone".

Mood and atmosphere

When asked whether her moods and how they determine how she feels, she replies that "Yeah definitely 100%. My moods affect absolutely

everything I do”. Asked how long the feeling lasts? She replies: “it depends, until it changes”.

When asked by her hypnotherapist to account for her past experiences she says: “they were trying to access parts of my brain when I was a child, like I forgot about it……I just feel like my brain just wouldn’t let me sort of get there.” She explains the difficulty in understanding whether what is “popping up is actually a real experience or if you’re imagining it”. She reports that the therapists would ask her to go behind certain doors and if there were certain people there? She adds that “I’d be imagining something that was actually real within my brain.” She found it difficult to tell between the real and the imagined. Reverting back to the past, she confirms that she couldn’t remember much from her childhood, but the memories she can recall are vivid. She believes she can remember the things that definitely happened and that are real not the imagined ones. As time goes on she considers that a defragmentation of memories occurs. She recalled certain memories momentarily but each time she returns she experiences a memory it’s changed in your head. “You remember it differently every single time.”

C1 also reports having hallucinations, on one occasion a person is apparently standing on top of her stabbing her, and she can physically feel the pain. She reports being wide awake when she experienced it. C1 also reports being in a battle, not knowing who is fighting who? ‘I’ve definitely not got a split personality disorder because I’ve not, I think I’d know, always me, but it’s just like my moods and my emotions, and like I say, my different personalities within myself, just comes out in different ways.”

C1’s relationship with realty was tenuous at times. She reports having numerous dissociative experiences. She describes herself as feeling “like my life isn’t real like I feel like I’m not alive. Honestly I can’t tell you how many times I’ve convinced myself that I’m dead (finite time) and that I’m basically stuck in a coma (in the present), and that all around me isn’t real.”

Section 5(iii) – common themes

Six common themes were revealed to be relatively common among the participants during the transformation process, from everyday life responses to create a heightened psychological meaning in the form of given description or structure, which is made explicit from the disclosures. The experiences of time that are disclosed may not for certain be psychologically equivalent to the everyday understanding of the experience that is disclosed, given the complexity and richness of first hand experience and the time lapsed since the experience. Consequently some psychological refinement is necessary for our understanding and to extract the most essential features of the experience in each case. (Giorgio & Giorgio 2017).

1. Time appearing to slow down

A1: “I feel like somebody just stopped the clock for me”. While G1 reports being “stuck in the present always”. ‘For years time dragged”. “I was severely suicidal. I was severely depressed, and I couldn't function. And I would just spend literally days just sitting, and time would drag.” While T1 reported how time just slowed down and seemed like “it was like I was in a quagmire of just mush…”. Asked how she viewed the

future, and whether time slowing down seemed like she eas trading water, she relied. ‘I was drowning, not treading water. I was drowning.”

2. Time appearing to speed up

A1, has been diagnosed with BPD and anxiety and depression, and when asked initially about her experience of time generally , some confusion arose as she replied, “I feel like God stopped the clock for me…..it’s only been five minutes and I’ve achieved so much. When asked in response to this if time had seemed to speed up or slowed down she replied “he stopped the clock , so like it slowed down I guess. You know, that five minutes feels like it was an hour and I’ve managed to achieve an hour’s worth of work in that five minutes”. L1 states that “as far as time goes, I feel like that when I have these manic episodes time does go quickly. And then it comes to, you know then you start to stabilise and you think, where has the last three or four weeks gone….whether time actually speeds up or it just feels like it speeds up, I don’t know.” Asked about an anamalous experience of time, S1 says :yeah…on a few occasions, I’d come into the house and I could have been out for two hours. What I felt like was 2 hours and I will come in and it will have been ten minutes. G1 says “I wasn’t bothered about the clock….I was having fun”. C1 says “I feel time for me always goes fast… I don’t feel like time is ever mellow…time is always racing constantly…..it’s never slow…..it’s like I can’t enjoy the present moment.” T1 replies when asked about how time flowed for her, “Slowly because it was painful, it was prolonged”

3. Time flow disruption

T1 says “I always feel out of control in regards to organising time. Yeah. Yeah, I seem far too optimistic about what an hour is achieved, what's achievable in an hour maybe”I’m response to to a question regarding the organisation of time.

Whereas C1 in response to a question in relation to a situation when time becomes altered, explains how the past present and future becomes a little back and fore chaos, “so for example, I’ve just been speaking to somebody and it’s not gone very well. So for me it triggers like a trauma to something that happened years ago, and then in my head, it’s like it brings back all these floods of emotions and the way that makes me feel…..I’m never going to find it again…” she goes on to add, “and then it all starts, like my head just goes into overload....it's like I can't seem to find happiness in the present moment, it's like I'm constantly worrying about what's going to happen next.” G1 has a slightly different experience to a reorganisation of time when she says “i just couldn’t organise time, people used to say I’s be late for my own funeral”, she adds when asked about where she sees her self in terms of temporal awareness, “sticking to the present always.” While A1 reports “I get agitated and stressed and run around in circles”…she adds”nursery drop off, it’s five minutes of your day….that to me is a massive thing….it’s almost like a days worth of mental preparation.”it was more like I was drowning not treading. I was drowning” was T1s reply to a question relating to time flowing.

4. Recall and rumination of past experiences

In response to a general question about not being able to see the wood from the trees, not necessarily about a relationship, C1 says “im constantly on a battle with myself, like you’ve got all theses good things

going for you (now), don't let this one thing ruin you. I dwell on things a lot. All the good memories I ll just replay in my head over and over again….I'm never going to meet anyone who's going to smoke me feel that happy feeling." In response to a question about her childhood, and following a memory of sexual assault., A1 says "all the boxes inside your head open up at once and that it ll becomes a little bit too much. So, basically, my memory at that stage was I don't remember my childhood, but during that period I remembered graphic details of everything and recorded that…"

5. Mood instability and attunement - reality distortion in the present

In response to coming off anti-depressants, which apparently caused her to experience a manic episode. S1 says "that was wonderful, I feel emotional sort of symptoms now rather than mood emotional symptoms, which I find are different to mood symptoms. L1 reports that "when I explained the mood instability, that was when, obviously they started to assess for bipolar. Responding to a question regarding her relationships, C1 says "I can't see any other issues that I really struggle with apart from emotions and my feelings and relationships…..something that triggers my emotions….I think that's my biggest trigger point." L1 notes it was difficult to think about the future….my mood was very up and down.

6. Sensitivity or hypersensitivity of emotions - reality distortion in the present

C1 says " I had a premonition….this thing that happened was so vivid like I remember seeing this person stood on top of me stabbing me but I felt it, like I could physically feel the pain….I just remember, it scaring my

head off….still to this day it affects me…..I went into a different dimension like I've never been able to come back from it….it happened to me theses years ago." L1 says in relation a bizarre or strange feeling, "So basically I had had this miscarriage, and I don't know whether this was to do with the anti depressants, I heard somebody at the front door,… I knew the keys were in, so it was perfectly safe, somebody opened the front door, somebody sat on my bed….I pulled the covers over fell asleep." L1 adds "visually I never saw anything, it was just auditory…when I woke up in the morning, I had this feeling I had been in a visitation dream". When asked to recall a time when she had experienced some kind of anomalous experience.. T1 says, "I think that was when I was having a breakdown, when I was in a domestic violence relationship…it was like I was having some kind of out of body experience so I wasn't quite here. My hearing was hypersensitive. I just didn't feel that I was in my own body". Asked if time appeared to speed up or slow down at this point, or, she responds, "I'd say the latter, so it's the slowing down…I had to wear a hearing defender it was that bad". T1 then says to a question relating to manic experiences, "T you need to slow down. You work in an autistic school and you are very, very heightened." Ti, you need to slow down. You work in an autistic school and you are very, very heightened."

Section 5(iv): differences between participants 'experiences

Although the six themes that have been identified were common among the participants, they each emphasised quite different experiences of them. One particular difference was demonstrated when two participants reported being surprised but nevertheless happy when only ten minutes had passed, when they imagined it had been much longer. In contrast

other participants reported a much more negative response to time slowing down, being disappointed and a little agitated that time had not gone faster. Each appeared also to have slightly different emotional responses to the experiences they had. There were evidence of sexual assault and miscarriage for e.g., which typically would be described as an extreme experience, however, the participants responses differed slightly. In the case of the sexual assault for e.g., one participant was open about it to her daughter, although she didn't tell another soul until she was reminded about it years later; while another responded by making careful recordings so she could take future action, indicating she may be less likely to repress it. However, they both looked back on the same event with the same trepidation. Given the higher level of reported experiences of depression, this might explain why not all participants reported time speeding up or slowing down in the same way. In some instances bipolar or something similar had been either clinically diagnosed or suggested by the participants, as being part of potentially, a comorbid related disorder, and which anxiety about the future played a part. Thus not having an exact diagnosis clinically and reliably diagnosed meant the reported experiences were a little vague at times and uncertain. In fact all the participants expressed concern over the validity of their diagnosis. There was very little consistency evident. Themes 5 and 6 were less common, perhaps given that the emphasis of the study was a temporal rather than an affective one. However, on relating here to the notion of mood as distinct from emotion, evidence was observed that a number of the participants had had their moods, as well as their senses, heightened, albeit in different ways.

Section 5(v): similarities between participants ’experiences

The evidence recorded of sensitivity enhancement, to changes in perception of reality for example, were linked with experiences, although not strictly speaking expressed, of a temporal nature, in that the experiences were nevertheless affecting the way the participants felt there and then. Time stood still. This experience was not experienced as a question of looking back or forward, but more of being situated firmly, entrenched, albeit momentarily, in the here and now; although the experience subsequently was extended in time, to over three years in one case. There was some commonality expressed in terms of consciousness in each case, as all participants who experienced the distortions in reality, reported being conscious at the time. Most, if not all the participants reported a temporal relationship with the past. T1 was asked about her temporal focus and she said “my mind was on a loop of memories, from the past, so I couldn’t deal with what I was trying to deal with.” She was asked further about ruminating about the past “it was all just past memories from when I was little…..between three and six.” (When she was sexually assaulted). T1 describes the unfolding memories, which were jogged by trading a file of some other person who had sexually assaulted someone (as part of her job) as a “jigsaw puzzle”….”all the memories were there but they were hidden”. A1 who was assaulted when she was fourteen, by someone she trusted, said “all the boxes inside my head open up at once and that it all becomes a little too much. So May memory at that stage was, I don’t remember my childhood…..I did become a little paranoid….I had the trust broken.” A1 responds to a question of her diagnosis saying, “I personally dont believe I have the condition…..anxiety and depression….they also diagnosed me with borderline personality disorder.” She describes

extreme desires to hurt her children, just after they were born, when they were very young, which may have contributed to her diagnosis and put on anti depressants? She reports experiences of time speeding up and slowing down and actually stopping. “God stopped the clock.” C1 who has also been diagnosed with BPD and been prescribed anti psychotic medication, and has previously reported trying to kill her self and has also reported experiencing both time slowing down, especially at bed time and speeding up or even racing.

Section 5(vi): the identification of subjective temporal structures

What follows is the result of an interactive and iterative process of reading through the data, identifying meaningful units of experience given the topic mod study, and then transposing those meanings using a process of eidetic variation to establish true and objective expressions of those experiences. The descriptive structures that follow offer an essential account of the most invariant meanings which were found to belong to the reported experiences (Giorgio & Giorgio 2017, Giorgi 2007, Englander & Morley 2021)

Structure 1: T1

T1 expressed a deep, yet relatively intense response towards the experience of recalling previous sexual assaults, describing the experience of recalling them itself as ‘painful ’and ‘prolonged’. A psychological reminder of past experiences resonated within her after reading about another sex offender, as part of her work responsibilities. An experience up until that point that she had not been conscious of. The impact of emotion on recalling the events and possibly reliving them

was sudden but intense. She became more aware psychologically of time slowing down in the present from that point and ruminated alot about the past. She describes her experience as a loop of memories, from past recollections to present reliving, to future anticipations. The experiences she recalled were highly traumatic in nature had heightened her senses, including her hearing, which possibly made her much more aware of the past; which she had endured after such a long time. When she recalled the past she used the word ‘abuse’ to describe her experience, as she became more acutely aware of what had occurred and things started to clear in her mind for her. She described it like being a jigsaw. T1 describes her memories as ‘tiny’, perhaps as she was so young and that time for her was so distant. Yet she adds, that that’s how she knows they are real, but once the memories become more vivid she was able to recall small details and start putting the pieces of the jigsaw together. She is even able to put a numerical number to them, saying she has eight memories, which indications specificity. When asked about her experiences of time further, in terms of whether time dragged, she describes her experience in a heightened and graphic sense, as drowning on the one hand and having to excel herself to deal with a surge of information and survive on the other. These polar opposites both indicate signs of moving away from the past. She refers to her mind as a computer, which has to process vast amounts of data, and which becomes overloaded and overwhelmed when too much information is input, which she cannot process and deal with, and which is accentuated, particularly, when she is in work, as as she works with young children with autism and attention deficit hyperactivity disorder (ADHD). She is often told to slow down as a result of interactions with her patients, which may well accentuate a manic experience. She describes time at this time, as speeding up and slipping away, which

makes her feel very frantic about her responsibilities. At this point she starts to think of the future, as the present, which together with its loop of fresh memories, mean her responsibilities start to overwhelm her, forming a conscious circle.

Structure 2: A1

A1 had experienced a sexual assault when she was young. The first thing she described and expressed in the interview was fear; because her husband was ignoring the Covid 19 rules and leaving home at the time, both psychologically, which makes her anxious and emotional, given her concern for her young child, and existentially, in terms of affecting her already tested post natal mood, leaving her to fend for herself; which appears to contribute to her having to fight for her identity and her life with a new child, all in the backdrop of Covid. She describes feeling out of tune with the world both domestically and environmentally. A1 acknowledges that she has a problem with organising and managing her time as a result of the psychological, social and environmental constraints she is experiencing. She refers to the present in terms of often feeling overwhelmed, due in part to a lack of attention or retentional focus towards the past, which she largely keeps hidden. However at the time of sexual assault she was focused enough to be able to identify graphic details and record them in the present to use them for future purposes. Her lack of focus on a day to day basis, may be due to the number of past experiences emerging from her memory and flooding her present, which she has to repress, and which may have been elicited due to her experiences during Covid 19. A1 describes how for her, time seemed always to ‘slow down’, which surprised her, given how much time she had on her hand and how much she had to do.

Typically this is viewed as a negative experience, as time dragging and is often associated with depression and boredom. However A1 experienced a short amount of actual clock time passing more positively. This anomaly will be discussed further later. A1 thought an hour had gone by, when in fact only five minutes had gone by; an experience which she might have otherwise described as time as speeding up, which might have been more conducive of a manic experience. Later, A1 describes her sense of time as dragging, as she watches the clock when waiting to take her son to nursery or in an evening, which makes her anxious. The relationship between anxiety and depression IS a complex and for bid one. Here A1's sense of time may well be responsible psychologically for her anxiety. Typically it is thought that anxiety may play a causal role in depression. For A1 the problem is more fundamental and temporal, for soon after, she reverts almost immediately to describing time as going by so quickly, as she says 'God seemed to have stopped the clock for her'. She describes time as both appearing to last an eternity and drag forever, sometimes, at the same time, certainly within the same organisational flow of time, in terms of where her everyday routine is concerned. She describes her perception of time as switching rapidly from dragging one minute to flying and disappearing the next, as she aims to prepare for her daily routines, which seem affected by the temporal disruption she experiences. Again A1 describes how the disruption to the organisation of her daily routines affects her in the present and on a day to day basis. She describes herself as being very much stuck in the present. There seems no order or structure to her day to day activities. She gets easily distracted as she flits from one task to another, all of which entails a disruption to her daily routine. Her inability to focus on time or a particular routine means she appears to get nowhere fast. A1 describes how the simple task of

dropping off her child at nursery turns into a logistical challenge, a task which her sense of timing and organisation constrains. She describes not being able to easily order and connect different aspects of the task such as getting her things together, getting her child ready, having breakfast, even though it is not until the afternoon. Her organisation of time doesn't flow easily from one thing to another. She is unable to prepare however long she has to do so. She finishes off by saying that an hour for her appears to speed by without her being able to complete all her preparations and she again remains surprised how quickly it's gone by and consequently she's failed to notice it, indicating an automatic process, and do what is required within the time scale to effect her task

Structure 3: C1

C1 experiences the whole past, present and future temporal spectrum, as she describes 'floods of emotions', 'I'm never gonna find it again 'and 'I can't see, to find happiness in the present moment'. This description shows the true structure of time, in so much as an experience is never truly contained within any particular moment, or confined to any one part of the temporal structure. C1 again describes clearly how she's feels about something painful and past in the present and explains the context of her feelings and emotions as always being relationship related. C1 describes her sleep pattern as a vicious circle, sometimes spending over half the day in bed, which causes her to become overwhelmed and shut down. She describes her sleep patterns as determining her moods. Consequently A1 then describes a bad day, after a disruption of her sleep, as feeling one that makes her feel emotionally drained and tearful. Her mood becomes depressed and everything seems hopeless, she

admits at this point becomes lacking in energy and demotivated, which is linked to her lack of appetite. C1 goes on to describe the effect of the upset in terms of her experience of time. Time just appears to go far more slowly than when she is on a night out enjoying herself, which is not in itself surprising. However, before she knows it, time has slowed right down and she is in bed, struggling to sleep.C1 has admitted to substance abuse, which cannot be counted out at this point. C1 describes how her memories affect her sense of time, confining her to the past, on the one hand, and then limiting her future possibilities on the other, although recognising that the present is so much more appealing, however she just can't appreciate it. This again indicates that her sense of time is not fragmented. She still retains a sense of essential self. C1 is able to describe her emotional state clearly enough, and is able to relate to what is meaningful to her, this is especially evident when she meets someone she connects with positively, albeit temporarily. She discloses her inner feelings and describes the rawness she feels, describing it further as both positive and scary. She describes how she feel like her life isn't real like she's not alive. She is very graphic about the psychotic type experiences she has. In them she convinces herself that she's dead and stuck in a coma and that all around her isn't real. C1 refer to the a finiteness of death, and a lifelessness in the present, ie a coma. It's also described as a repeating pattern. She describes, psychologically how scared she is and even describes the pain as feeling it physically. This relates to her sense of existence as it does her psychological Throughout this experience her understanding of time and it's structure remains nevertheless unaffected. C1 goes on to describe the experience as causing her to disconnect from reality and experience something quite different. She refer to her sense of self altering, causing psychological changes in her which have lasted three years to date. The

experience is described as spanning time. Asked about the future, C1 describes her thoughts on death, her own and others, but also looks more positively on the future in terms of wanting to be successful, but then immediately reverts back to the idea that her happiness will be short-lived. This sense of foreboding is experienced as more mood and anxiety related, not just psychologically, in terms of fearing outcomes that remain uncertain and un-experienced. If we want to understand what it means to be an authentic human being, then it is essential that we constantly project our lives onto the horizon of our death. This is what Heidegger famously calls "being-towards-death". If our being is finite, then an authentic human life can only be found by confronting finitude and trying to make a meaning out of the fact of our death. C1 moves between the past and future frequently expressing a desire to be able to circumnavigate her prior behaviours, yet again she acknowledges the finiteness of death. There is nothing morbid about being-towards-death. Heidegger's thought is that being-towards-death pulls Dasein out of its immersion in inauthentic everyday life and allows it come into its own. It is only in relation to being-towards-death that I become passionately aware of my freedom. She describes herself as having different moods, emotions and personalities, which come out as puts it, or emerge, in different ways. There is no evidence of a loss of self or minds or thought intrusion, or her sense of lived and implicit temporal experience, which she frequently describes as spanning time C1 describes time on a temporal spectrum. She sometimes experiences time as being the past, future and present all in one day. There’s no ordered sense or temporal boundary, all aspects of time appear to converge. She also describes the temporal unexpectedness of the change that occurs to change the mood, from day to day. Finally C1 challenges the notion of reality as opposed to imagination. Her sense of

reality is not distorted, nor is her sense of self delusional. She is just describing something from her past that she fails to associate with via this means. She fails to relate to and thus recognise the experience, when she is very young, and so she is not sure if anything at that time, did happen or whether it was imagined. She says she simply couldn't access this part of her past. C1 relates her own memories to the idea of fragmenting and changing. The experience of it changing as time goes illustrates her relationship with how she's feeling now, which started at the age of 11 it appears, as those memories remain vivid, and helped explain her own life as it is now. From a temporal perspective time has both endured and extended and continues to form part of C1's conscious experiences, albeit in a fragmenting and changing aspect. Although to C1 she hasn't fragmented anything she can remember, to her everything she recalls is real. To C1 her memories are not only very vivid they are real. C1 in reaching back in time is doing so in a sense that she can relate to now, that continues to appear real to her now, and continue to endure after all this time

Structure 4: G1

G1 takes high dosages of multiple medications. G1 often experiences time as dragging, which she recounts as being a more memorable aspect of her condition. This feeling of inner and last containment is conducive with a feeling of depression. In terms of her routines and organisation of her time, G1 relates to her body clock, as being susceptible to the traditional 12 hour clock time cycle. Although she adds that she needs to take her medication to help her sleep. She says she has no problem sleeping. She often finds herself in a deep sleep, which when induced by the medication, becomes a problem for her wetting the

bed, the longer she sleeps. G1 explains a little about her inability to organise her time. She typically thinks that she has more time than she has, which does not indicate that time drags, although it does appear to slow down and give her a false sense of security. Her lack of temporal awareness follows lengthy periods spent sleeping. In terms of prioritising time, she says then she has no time once in work, which in some ways is a different experience to feeling you have more time than she thought she actually had when he was there. G1 appears to get lost in time. Her sense of awareness of time whether it seems to her to go faster or slower than she was expecting, remains part of the same organisational structure, of being disconnected from time over time, indicating that she may become lost or stuck in the present. She stays awake longer before going to bed when her partner is home, which is a break in the routine for her twelve hour body clock. Asked about whether she finds herself stuck in the past, she says ‘always’. G1 has made a conscious decision to stop thinking about the past and that appears to enable her to focus more on the present and by doing so frees up a lot of time for her, at the same time that G1 is unable to organise her free time productively, she is sometimes aware of time dragging, even stoning still. She continues to be dictated to by her mood swings which inhibit her. Nonetheless she continues to train herself to stay grounded in the present. However being grounded in the present means she is unable to articulate and organise her time, in terms of its flow between past, present and future.

Structure 5: S1

S1 emphasises her experience of depression and psychosis and the effect of medication on her health, although diagnosed with bipolar with psychosis. In describing its effects she pays particular attention to a

perceived difference between the emotions she felt and the moods she experienced and the link with her medication. Her mood seems to have improved as a result of coming off the medication. S1 expresses her confusion about time and it's effects and the relationship with her disorder. She says despite the depression she has always looked forward to better things. She questions whether she even has depression, although she says she has experienced being stuck in the past. Her lack of specific childhood memories might also suggest a sense of repression. S1 says she has experienced both manic and depressed states simultaneously. She is very matter of fact about a question of time changing and the subjective experiences that entail. The ten years which have elapsed since she left the army, have seemed to have gone by fast for her, recounting in fact, that she has very little memory of this now, although photos certainly seem to trigger some emotional response. S1 refers to the need for a military type temporal and organisational structure, which is rigid, and now very much lacking in her life. She refers to the importance of the environment in maintaining that structure. She refers also to the time passed since that as being forever ago. S1 recounts her hallucinatory experiences, after a miscarriage which she puts down to the drugs. She says she's always been a faster thinker even when she was young, however drugs, a mix of anti-depressants and anti psychotics speeded up this process. The manic experiences that appeared to entail the medication she was taking, resulted in her not being able to appreciate the here and now and appreciating the present time with her son. S1 also reports changes in her temporal perception, where time seems to have speeded up, in the sense that only ten minutes had gone by, on more than one occasion, but which seemed much longer to her. She does not report this however, as a negative experience, although time slowing down is often indicative

of feelings of depression and rumination. S1 relates to how the smallest event can disturb her. She reports how this results in a disorganisation of her time. She gives an example of dropping a glass, just as she is going out, which smashes. This might otherwise be considered a normal and small occurrence, however her description of it causes to feel a sense of ‘sheer stress’, which suggests her reaction may be irritability and, or distractibility, resulting in S1’s mood changing quickly. The session ends with a question left hanging of identity, one relating to S1’s sense of belonging, identity and search for peace and contentment.

Structure 6: L1

L1 describes her difficulties as starting with the diagnosis which took months and months to facilitate and organise. She describes the more dominant presentation of depression however she explains how she rarely presented with manic but it was there and thus perhaps went by undetected. When asked about her experience of time L1 describes it first as going fast when feeling manic. In contrast when asked about time in relation to her moods she describes it as slowing right down when finding herself experiencing depression, indicating the link between mood change and how they are then temporally experienced and perceived. Having described time as slowing down and speeding up, she also describes her experience of the present. The future seems a little beyond where she is comfortable to go, even when booking a holiday. Remaining grounded in the present often indicates an inability to move either forward or backwards in time. When describing her miscarriage, her sense of depression experienced a bereavement is evident. She describes time as seeming to stop suddenly, at which time everything comes to a grinding halt. There is not past or future reality or

direction at this point in time. The problem of mistaking the experience of depression while grieving, as opposed to the full blown experience associated with bipolar, and, or, unipolar depression is evident here. L1 then starts to experience manic episodes due to the use of anti depressants. Asked about her experiences of time and routine following the miscarriage L1 describes how time essentially was confined to the present, a feeling and experience that was made worse by the effects the anti depressants were having on her mood swings. The culmination of various event, including being caught drunk driving, that L1 experienced was thoughts of suicide. This finiteness here exemplifies her mood and her desperation for escape and freedom from her current experiences. At this time, L1 describes having an hallucinatory experience. It has very little temporal reference however it does indicate he state of mind at the time of the miscarriage and drink driving experience, together with the mix of drugs she was taking. There is no indication of dread of the future or of uncertain things to come evident, but rather more of an expression of how desperate she was feeling in the here and now. L1 doesn't dread the future as recounts. She looks positively towards it. She again describes the medication countering her depression. The fact that she can experience positive things in the future indicate that there are no intrusive thoughts or delusions of reality, which might indicate too the psychosis was brought about not as a schizophrenic change in her mood. L1 is describing the fact that her memories have been either subdued or repressed and that parts of her life are inaccessible. She finds it uncomfortable or difficult to look back in time, preferring to look forward. This indicates that L1 is not anxious about the future per se, nor does she now ruminate on the past, indicating some kind of depressed state. Her experiences of anomalous time have seemed to have eased. She describes herself as feeling less

concerned with time per se and more concerned with getting old. This in itself is not an anomalous experience of time.

Section 6: Discussion

The findings that have been presented demonstrate that all the participants who were interviewed described their experiences of time in terms of there being a structure consistent with (Husserl 1991) idea of a temporal flow between a remembered and retentional past past, running through a conscious now to an anticipated, protentional future. The experience is described as flowing back and fore. The temporal arrangement of the experience affects not only one's emotions but also adds to the background mood that changes the way individual's experience certain events, before, during and after they are experienced.

To remind readers, six specific and interrelated themes were identified: (time slowing down, time speeding up, time flow disruption, ruminating the past, mood instability and change, emotional sensitivity to change), which as a whole demonstrates a particularly striking feature relating to how the structure of time appears to be built inherently into the fabric and mode of human experience, into what (Husserl 1991) calls lived time, and what (Fuchs 2013) calls implicit time, resulting in our conscious and explicit memories, that relate particular events, situations and circumstances, forming a gestalt type description of a whole of life experience.

All the participants in this study have been assessed clinically to some degree and extent or other, for a mood disorder. It is not clear from the

individual descriptions of the diagnostic process that each was subjected to, what in fact was concluded?. Indications of bipolar disorder and comorbidity were evident, however, nothing conclusive to isolate the disorder. The essence of the descriptions that were given, as a while, certainly suggests flaws in the diagnostic process and the subsequent medication pathways that are prescribed. However, notwithstanding this, what emerged as a whole from the descriptions as experiences of time, and the identification of the themes is that modifications in the structures of our experience of time, affects the way we are affected by various, physical and mental stressful events, situations and circumstances. This structure became evident as each of the participants described their experiences, in that there was a constant reference to how the response or effect of the experience still affected them, however long ago the experience was. It still resonated within them. The experience of a miscarriage for eg, was still felt in a way that contained aspects that had past, present and future affective ramifications. The effect on one's mood moreover appeared to increase in not only one's consciousness but one's sensitivity to temporal change, resulting in alterations to the flow of time, and thus in their overall capacity to organise their day to day experiences. In reality everything has changed in time, although they remain unaware of the influence of time on their behaviour.

The core features of bipolar according to DSM 5 include: low and high levels of energy and self esteem; while a core feature of schizophrenia is a loss of vital contact with self and thus reality, or even a loss of common sense or self evidence, leaving one perplexed. All of these concepts or symptoms emphasise different aspects or disturbances, of what one might term the 'normal 'taken for granted existence, which characterises our everyday life. The temporal structure underlying the

disorder and any disturbance in it will have ramifications for the behaviour that entails. Identifying with this structure is no easy task due to the complexity of conditions and variables involved, including bodily, environmental and inter subjective influxes (Fuchs 2013), and each individual case is different in essence although commonalities and similarities do exist.

There were a number of differences reported in each of the participants ' descriptions. One notable difference was demonstrated when two participants reported being surprised but nevertheless happy when only ten minutes had passed, when they imagined it had been much longer. In contrast other participants reported a much more negative response to time slowing down, being disappointed and a little agitated that time had not gone faster. Typically as described by (Fuchs 2007, Stanghellini et al 2016, Droit Volet et al 2010a,b, Vogel et al 2018), in cases of depression, inner time is perceived to be slower than world time, and usually as a result experienced negatively, causing a sense of deflation and anti climax, which has the effect of having an affective influence on one's overall mood, to the extent that one feels bored or overly anxious. In this case however, from a phenomenological perspective two participants described their personal and subjective experience of time in the opposite sense, reporting the slowing down of perceived clock time, to the extent it did, as both surprising and positive.

Northoff et al, (2018) aim to try and explain this reversal and desynchronised experience by objectively measuring the supposed duration of the interval in outer time perception with the actual duration of the subject's inner time experience, which acts as a template for estimating outer time intervals and by comparing the distortions on

neuronal, psychological and phenomenological levels or measures or time.

(Northoff et al 2018) help explain the relationship between symptoms and underlying processes, as spatial temporal, proposing a link between neural activity and the organisation underlying spontaneous activities, both in an extended and continuous fashion, stemming from affects in the flow of time, and the way inner and outer time are balanced and organised. (Fuchs 2013) refers to this process as conation. The change in this relationship effects the way we experience the flow of time. (Northoff et al 2018)

Typically inner time speed is abnormally slow (as in depression) or fast (as in mania). This serves as a template against which outer time is measured. However, by taking on the role as default-mode function, this impacts and modulates the perception of outer time speed in an opposite way, ie, as appearing too fast in cases of depression and too slow in cases of mania.

Psychological measures of time typically focus on objective time, or durations between intervals, to be specific. However this doesn't easily explain the variation between outer and inner time. It can help explain the experiences of slower time perceptions in cases of depression and faster perceptions in case of mania however it doesn't accurately explain the variability that is experienced between the different levels of behaviour.

Phenomenology on the other hand more clearly distinguishes between perception of inner subjective time, i.e., self-time, and outer or objective

time, or world-time, and the apparent desynchronisation or dissociation from each other, which might explain switches between moods, in cases of bipolar, and thus helping to identify more clearly with the symptoms.

(Northoff et al 2018) compare the typical psychological results with the phenomenological descriptions for measures of desynchronisation. The inner time serves as a template, it time has appeared to go by fast, when in fact as far as outer time is concerned it has not, only ten minutes have elapsed and not sixty, as in the case here. In ‘normal ’cases there will be none or little difference in the estimation. In the cases reported here the abnormally accelerated perception of inner time produce the wrong template for reproducing accurate reproductions of time. What is presented to them or perceived by them instead, as in the case here is, the reproduction of a relatively short period of outer time, as a much more elongated measure of inner time. However, in both cases reported here, more was reported to have been archived in a relatively small amount of time than had been deemed possible, given how much outer time had actually elapsed. In cases of mania, where inner time as a template is perceived as being abnormally fast, leads one to perceive and subsequently under produce (especially longer) durations of events in actual outer time, as shorter and faster than they are in reality. Everything appears to take less time and is completed faster. In the present case, what happened to be perceived abnormally, ie a measure of time, appeared positively and meaningful, in terms of the achievement and thus might not be deemed abnormal. What was meaningful here was the idea that so much had been achieved given how little time had actually passed. This experience can be compared with a typical manic experience, where on becoming absorbed in an enjoyable activity, time is described as flying by, rather than slowing down. In this instance May

have lasted sixty outer time minutes, which seemed like only ten. What is normal to some May be considered abnormal to others, depending on how normality is measured contextually.

Other examples of different experiences and affects of inner time were exemplified, following reports of serious sexual assault from two of the participants, and a miscarriage from another for e.g. Each of these experiences would typically be described as extreme; however, the participants 'responses differed in each case. Each appeared to have slightly different emotional and rational responses to the experiences they had. In the case of the sexual assault for e.g., one participant was open about it to her daughter, although she didn't tell another soul until she was reminded about it years later; while another responded by making careful recordings so she could take future action, indicating she may be less likely to repress it and perhaps that her reasoning cavity had been impacted upon less (Minkowski). Themes 5 and 6 were less common, perhaps given that the emphasis of the study was temporally focused rather than affective or mood related. However, on relating here to the notion of mood as distinct from emotion, evidence was observed that a number of the participants had had their moods, as well as their senses, heightened, albeit in different ways. In the case of C1 the sense of foreboding that was experienced (as an hallucination), was reported as being attacked in her bed. She described feeling actual physical pain, which indicated more than just fear, but something more essential that appeared to be derived from her ongoing mood or existence, to which she continued to respond emotionally, and on this occasion, much more severely due most likely to the fact that she was under the influence of an illegal substance. Her overall mood had been one of anxiety and dread for some time, not just in the psychological sense of fearing a

positive outcome to a certain event, something that remained uncertain, but in an existential sense (Heidegger), fearing that her life was going nowhere and needed to change. She described herself as growing older, coming to an age where she felt she should be married and settling down like all her friends, when in fact she was all alone instead. Her life was being inauthentically lived in time. That is to say, if we want to understand what it means to be an authentic human being, then it is essential that we constantly project our lives onto the horizon of our death. This is what Heidegger famously calls "being-towards-death". If our being is finite, then an authentic human life can only be found by confronting finitude and trying to make a meaning out of the fact of our death. This had significant meaning for C1. C1 also reported being diagnosed with borderline personality disorder, however the evidence of time seems to suggest. Typically those with this disorder lack the capacity to establish a coherent self concept.They tend to switch from one present moment to another, in a manic sense, being totally identified with their present state of affect. Instead of repression their defence relies on splitting their self that excludes past and future as dimensions, as objects of bonding and commitment, responsibility and guilt; (See Fuchs 2007), and although C1's mood does switch her sense of self does not remain static in the present, but often ruminates and looks forward. She does feel guilt, for her actions, but this signifies responsibility. She also strives for a healthy, committed relationship. There is no evidence that any temporal fragmentation of try self is avoidant in nature, and although her relationships are largely unsuccessful and uncertain, she still strives for more clarity. Relationships are uncertain but clearly a very important to C1.

Temporal structures, meaning and the most essential aspects

Husserl persuades us that our impressions are where our sense of time is first developed. They are the first phenomena that define and constitute our sense of time. However, they are insufficient on their own. If this idea alone applied, we would only ever feel change, the ongoing modification of the present-day contents, not their disappearance into the past. Retention phenomena of a different kind are necessary for this. Our ability to perceive time comprises not only the ability to recall the past but also the ability to anticipate the future, in a protentional sense. A person anticipates the notes of a melody that she perceives to be familiar. Her anticipation of what will happen next is realised as the music progresses. It is evident from this that Husserl's phenomenology of time-consciousness is more concerned with the structure of the act of perception that enables us to perceive a temporal object as unified across its numerous moments, than it is with this descriptive account of some of the fundamental characteristics of time's appearance and content.

Lived time and experience

In each of the six accounts given by the participants it is evident that individually they live their lives independent of each other, although they share similar experiences. Moreover those experiences though different, were all meaningful to each individual in their own way.

The relationship between mood disorders, the temporal experiences underlying, the meanings that emerged from the descriptions, together with the subsequent effects the disorder has had on them both temporally and affectively are experienced different. What links their

descriptions however is their sense of a shared lived time, what (Fuchs, 2005) refers to as implicit time. He reminds us that when a child is playing with his toys obliviously, lost to the world, one may assume that there is no sense of the time passing. Lived time moves along unimpeded by the general pace of passing time. This is implicit in the child‘s experience of being totally engaged while playing, being directed as he or she is by their immediate goals. Time simply unfolds through the processes of bodily actions. (See Wyllie 2005). Future and past do not make their impression necessarily from out of the pure presence of “becoming.” This implicit mode of temporality is relived every time that we are absorbed in what we are doing. All sense of time is lost to us, time exists experientially, unimpeded in the fluent performance of the melody you might say. This structure is evident in the experiences of time of the two participant who reported time as seeming to fly, although in fact it hadn’t been as long as they first thought. This sense of time disruption can apply to cases of both depression and mania, and the particular experience appears to be linked to the underlying structure and attitude adopted .

Minkowski’s basic hypothesis relates to mania like melancholia as having its roots in the temporal structures of human experience, and specifically in an impairment in the way that time unfolds, ie, in terms of the way our temporal experiences are structured into a past, present, and future. (See Minkowski, 1933). A person in a state of manic excitement for e.g., is thought to live only in the now; there is no future for them beyond this event horizon; any interactions with the environment are restricted to the here and now. While a person suffering with depression on the other hand, remains immersed in and thus

consequently becomes a prisoner of his past. In the example just given above, this is not necessarily so.

Minkowski realized that psychopathological disorders were not an overlap of symptoms, but the deep expression of a modification of the entire existence of the subject. In depressive disorders, the fundamental phenomenon that organizes existence is related to temporality and the symptoms present in melancholic depression must be understood based on that experience and not independently of this. The melancholic do not experience time ‘as propulsive energy’, but feel it as a flow of temporal current. Thus, for these patients, the future is perceived as blocked; their attention is directed to the past and the present feels stagnant, any activity they engage in May release them from this stranglehold. In the same sense as the manic experience, there is typically no way beyond the present feeling for the person depressed. (See Cardinalli, 2012). That is to say, when our temporal fluidity is inhibited in any way, our temporal becoming ruptures and any propulsion for the future we might have otherwise had dissolves, creating an existential rigidity that blocks our future possibilities, as all our energy is focused on the inevitable episode, we are temporarily and temporally in chains. The understanding of depression by means of stiffness of fluidity of becoming goes beyond the causal origin of illness, seeking to understand the meaning of the lived experience of the patient. Minkowski (1933/1995) prioritized clinical experience and patient interaction, understanding implied depressive disorder with fluidity and the movement of becoming.

However one views a given mood disorder, what ever model one chooses to frame the analysis in and what ever dimension one opts to

use to measure what is found, will in this case be more informed and meaningful if one is able to identify with the underlying temporal structure. All things involve time and all measures of time must incorporate subjectivity into their account, and structure of their findings.

I will return shortly to the themes and the meaning that evolved from the analysis of the individual descriptions. However it must be stressed that there has been no attempt to quantify the findings or generalise the outcomes or objectives. Phenomenological accounts of experience are more about the particular than the universal, although in an objective sense. The focus and aim was to learn more about the subjective structures that underlie anomalous experiences of time within the context of mood disorders. As noted above there were six themes identified: (time slowing down, time speeding up, time flow disruption, ruminating the past, mood instability and change, emotional sensitivity to change). As discussed the most common recurrence was indications that alterations in the structure of time have occurred, experienced in different ways as discussed, but basically as time seeming to slow down, speed up, alter its organisational flow, an over indulgence in rumination and an over sensitivity to others, particularly significant others. The frequency of these findings may be confined to these individuals as may the evidence; nevertheless the resemblances of the individual experiences, which I refer to here in terms of the apparent links between temporal structure, i.e. the extended and enduring nature of its flow, and the moods that entail, which in turn affect the emotional response that entails; means that in each case, whatever the particular experience a sense of meaning can spans time. In referring also to a sense of heightened sensitivity, although this wasn’t found to be as common, indicated that on a number of levels, i.e., neuronal, psychological and

psychological, the body and mind had become more attuned, in line with Heidegger ’sense of existence and anxiety. As a psychological response to crisis and a variation to the temporal and mood related themes, it is worth considering that in a number of examples of hallucinations, the finiteness of time was experienced, which could belie a need to be free from the temporal chains that appear to confine our more deeper meaningful experiences, creating a kind of internalised organised chaos, out of which there is a real desire for the real meaning we attach to our experiences to emerge.

Relationship with mainstream diagnostic criteria

The question now is, how might adopting a temporal dimension to describe subjective experiences of anomalous time, be helpful to informing mood order diagnosis, on line with what the current DSM system prescribes?

Firstly, in here of the limitations of the study, the experiences described here might equally apply to bipolar, unipolar depression, mania, borderline personality disorder, ptsd, adhd, and schizophrenia or a mix thereof, along the dimensional spectrum

Secondly, it is also acknowledged that what has emerged is not an attempt to make a formal diagnosis based on observable symptoms and signs as prescribed by the various authorities. It is intended as an analysis of the temporal structures involved in mood disorders, with a view of identifying differences and similarities, as well as any unique factors that were found. These factors are usually more subtle and are missed by third party perspectives (Giorgio & Giorgio 2017). I refer to the

heightened sensitivity to others, and the meaning that psychosis might have in terms of relating to mood disorders not just psychologically, but as an existential and bodily feature, which might help explain the disruptions that occur to our inter subjective relationship with others and the constraints on our behaviour that entail, as well as being an indication of both time's finiteness and its enduring and extended qualities. (quote). Hallucinations can arise when our more natural responses become disturbed, appearing to us to be both existentially unreal and worldly distant from our sense of our real self, which is meaningful. (Parnas & Sass 2001).

Disorganisation can be viewed as adaptations to our modes of experience and action that indicates the world which we relate to is no longer steady or meaningful to us. This sense of disorder is difficult to respond positively to, given the constraints on our temporal structure and thus view of the world. Sass (2003) describes this unstable sense of the world that is experienced as a restriction on the possibilities open to us. The pathways to which have become unreliable, even unrecognisable. Consciousness is flooded in the present with things from that past and future that make meaning and sense impossible to navigate and organise, often compelling one to withdraw from the world in the present, leaving no option other than to return to the past. (See Sass 2003, Stanghellini & Ballerini 2004). One;s sense of belonging and self has not only been clouded, it may have affects that are far reaching over time. Consequently people lose motivation, energy, desire and become empty emotionally as a result of this disorganisation of time and withdrawal from the world, which is no longer recognisable, as in the cases of bipolar, depression and schizophrenia.

Clinical implications

The phenomenological findings of this research study suggest that subjective anomalous experiences of time, as described here by the participants, all of whom described various mood disorders, is related to alterations in the temporal structure. Thus the way time is continuously experienced and endured and thus structured over time, is directly relevant and connected to, how our moods, emotions and feelings are expressed, as they too infield on a day to day basis. Everything we do involves time in some away or another and thus as a defining feature of mental health experiences, it should not be under estimated

The data gathering process using EAWE's unique semi structured guidelines, supported by Giorgio's 'Descriptive phenomenological, psychological model of analysis', and using second person interview techniques, to create more empathy and thus instill more trust and better communication into the relationship between clinician and subject, were combined to elicit particular, yet nevertheless valid presentations and dynamical and temporal descriptions of various aspects of mood disorder; and although the sample was limited in size, scope and time, and requiring further clinical examination, (i.e. quantifying more findings over time may help to establish more differential or unique representation) the results nonetheless indicate that a variety of mood related disorders experience alterations in temporal structure, and thus consequently may be grouped together. (I refer here for e.g., to a group that might consist of: over rumination on the past, loss of childhood memory and thus a failure to ruminate, and repressed feelings of relationship failure, which can be both ruminated on and repressed); all of which appear together and thus help to characterise the disorder as

not only affective but temporal, as they all appear to extend and endure over time, and time is the common dimension that links them.

Clinicians might learn to become more aware of the sensitive nature of time and what unfolds often as a result of time enduring, such as a heightened sense of touch, sight or hearing, that arises as our temporal structure is altered, and as we become more aware of time's grasp. Differentiating between mood and emotion, in terms of its temporal presence may help understand how mood disorders extends itself, as the moods and emotions that a disorder elicits, endures over time. There also appears to be a temporal consequence for our emotions, as they become frayed, given the effort that is involved in either ruminating on experiences or repressing them. Clinicians may need to become more aware of the kind of temporal relationship that our moods and emotions have with each other and now this relates in turn to our ability to manage the flow of time. (Droit Volet et al 2011). A constrained sense of time can at the same time, induce a mood to switch rapidly, or become temporally settled in as a cognitive constraint. Emotions can play a significant role in affecting our memory, (Tyng 2017). Equally our emotions can enable a feeling to be both repressed temporarily and endure and extend over time. (Fuchs 2013). It is anticipated that this additional insight can help support existing research and diagnosis with a view in time, of administering more suitable treatment pathways and thus improve the quality of life for more people by understanding the subjective and temporal nature of their particular disorder.

Chapter 6 : Conclusions and future research

Any question of time can at first be baffling. However, this is not always so delimiting. Like time unfolds and unravels so did this research project. In line with the primary research aim, a close examination of how disruptions in time perception are experienced, and how these disruptions relate to human consciousness was undertaken. This was done specifically to help us identify with the relationship between the psychological structures and the affects and emotions that support and underlie the temporal experiences, that relate to mood disorders. Identifying with the kinds of disturbances and modifications that affect a person's temporal relationship with the world remains a useful line of enquiry if we are to gain a better understanding of both consciousness and mood disorders evolve.

To remind readers, in terms of the basic methodology, philosophers who believe that factors lying outside an individual's mental activity ultimately justify knowledge, are often referred to as externalists. Husserl on the other hand, maintained that a descriptive account of internal factors was important for understanding the structure of our knowledge claims.this view underpins phenomenology as a suitable methodology for pursuing knowledge via a reliable subjective means. In his early, epistemologically oriented research, Husserl examined the purposeful nature of mental states in the pursuit of knowledge. As soon as it became clear that this emphasis on intentionality and the accompanying role of mental acts in presenting intentional objects had theoretical limitations, Husserl radicalised his strategy and expanded his analyses to include areas like temporality, inter-subjectivity, and culture from a "transcendental" phenomenological perspective. (See Tassone 2019).

Notwithstanding the virtues of this approach to the pursuit of knowledge, this research study was aimed more at and certainly focused more on, gaining knowledge about the subjective structures of experience from a psychological pursuit. (Giorgio & Giorgio 2017).The Descriptive Phenomenological Psychological Method was used to analyse the data. It is trusted five-step research system with Husserlian Phenomenology as its philosophical foundation, (Giorgio & Giorgio 2017, Englander & Morley 2021). This method was deemed valid because it has a phenomenological orientation at its core and has been specifically designed as a semi-structured format that offers both flexibility and control to capture anomalies. The majority of the questions came from within the EAWE guidelines. 2017 (Sas et al 2017, Fuch & Van Duppen). Giorgi (2009) had to adapt Husserl's technique for psychology because Husserl was a transcendental philosopher, aiming to analyse inner consciousness. In doing so, Giorgio’s (1985; 2009) five-step method offers the systematic rigour of "science" without treating the subjects of the study in a reductionist manner. Admittedly, the approach is more discovery-focused than verification-focused, for scientific purposes.

The phenomenological findings of this research study suggest that subjective anomalous experiences of time, as described here by the participants, all of whom described various mood disorders, is related to alterations in the temporal structure. Thus the way time is continuously experienced and endured and thus structured over time, is directly relevant and connected to, how our moods, emotions and feelings are expressed, as they too infield on a day to day basis. Everything we do involves time in some away or another and thus as a defining feature of mental health experiences, it should not be under estimated

Studying time as a fundamental dimension of subjectivity will enable a better understanding of its subjective nature, which can help improve the reliability and validity of diagnosis overall. The diagnostic classification of all mood disorders is a complex and dynamical process that is problematic for clinicians and researchers alike.

Strangely though, neither anomalous lived subjective experience or temporality are included in the main diagnostic criteria or standard symptom checklists within DSM 5, or ICD 11; although the link between distortions in subjective time and mood disorders has been well documented and reported widely in the psychological literature, as reported in this study; which is no strange thing, given that subjective time experience is evidently fundamental to our daily social and cognitive practices.

Contributing practically in an applied healthcare sense was always an overall aim of this research study. Clinicians face ongoing constraints, and can do with all the help they can get.What might they learn about a study of temporal anomalies relating to mood disorders? Firstly, they become more aware of the sensitive nature of time and what unfolds often as a result of time enduring, that any experience involves time, which has an identifiable structure. Differentiating between mood and emotion may help understand how mood disorders extend overtime. There also appears to be a temporal consequence for our emotions, as they become frayed, given the effort that is involved in either ruminating on experiences or repressing them, which is a common experience in depression. This also has a direct link to brain and cognitive incapacity and constraint. (Northoff et al 2018). Clinicians may need to become more aware of the kind of temporal relationship that our moods and

emotions have with each other and now this relates in turn to our ability to manage the flow of time. (Droit Volet et al 2011). A constrained sense of time can at the same time, induce a mood to switch rapidly, or become temporally settled in as a cognitive constraint. Emotions can also play a significant role in affecting our memory, (Tyng 2017). Equally our emotions can enable a feeling to be both repressed temporarily and endure and extend over time. Either way the influence of time is evident.(Fuchs 2013). It is anticipated that this additional insight can help support existing research and diagnosis with a view in time, of administering more suitable treatment pathways and thus improve the quality of life for more people.

The aim is to continue working with the current six participants and in time extend this number on an ongoing basis. There are definitely areas of focus that can be looked into further. One such area given the high levels of mis diagnosis is to look into how one might identify better with the temporal features that maybe more evident and characteristic of a certain specific disorder? That is to say, how, if at all, are the structures underlying an experience of depression different from an experience of mania for eg, or from borderline personality disorder? There is some evidence that our temporal experiences play a role in eliciting the moods and emotions that entail a sense of our self and inter subjective self (Fuchs 2007m Fuchs 2013), so more information and a better subjective understanding of this kind of experience, can help improve our knowledge of mood and emotion as well as give us more insight into how time unfolds and affects different aspects of our mental health over time.

Bibliography and references

1. Achenbach, T.M. and Edelbrock, C.S., 1978. The classification of child psychopathology: a review and analysis of empirical efforts. *Psychological bulletin*, *85*(6), p.1275.
2. Aho, K.A., 2013. Depression and embodiment: phenomenological reflections on motility, affectivity, and transcendence. *Medicine, health care and philosophy*, *16*(4), pp.751-759.
3. Aho, K., 2008. Medicalizing mental health: A phenomenological alternative. *Journal of Medical Humanities*, *29*(4), pp.243-259.
4) Allport, G.W., 1937. The psychologist's frame of reference. *Psychological Bulletin*, *37*(1), p.1.
5. Angst J, Marneros A. Bipolarity from ancient to modern times: conception, birth and rebirth. J Affect Disord 2001;67:3-19.
6. Angst J, Marneros A. Bipolarity from ancient to modern times: conception, birth and rebirth. J Affect Disord 2001;67:3-19.
7. Angst, J., Rössler, W., Ajdacic-Gross, V., Angst, F., Wittchen, H.U., Lieb, R., Beesdo-Baum, K., Asselmann, E., Merikangas, K.R., Cui, L. and Andrade, L.H., 2019. Differences between unipolar mania and bipolar-I disorder: Evidence from nine epidemiological studies. *Bipolar disorders*, *21*(5), pp.437-448.
8. Angst, J., Rössler, W., Ajdacic-Gross, V., Angst, F., Wittchen, H.U., Lieb, R., Beesdo-Baum, K., Asselmann, E., Merikangas, K.R., Cui, L. and Andrade, L.H., 2019. Differences between unipolar mania and bipolar-I disorder: Evidence from nine epidemiological studies. *Bipolar disorders*, *21*(5), pp.437-448.
9. Antoniadis, D., Samakouri, M. and Livaditis, M., 2012. The association of bipolar spectrum disorders and borderline personality disorder. *Psychiatric Quarterly*, *83*(4), pp.449-465.
10) Archibald, M.M., Ambagtsheer, R.C., Casey, M.G. and Lawless, M., 2019. Using zoom videoconferencing for qualitative data collection: perceptions and experiences of researchers and participants. *International journal of qualitative methods*, *18*, p.1609406919874596.
11. Ariza, M.A., Alvarez, R.M. and Berrios, G.E., 2009. A review of the natural course of bipolar disorders (manic–depressive psychosis) in the pre-drug era: Review of studies prior to 1950. *Journal of affective disorders*, *115*(3), pp.293-301.
12. Barlow, D.H., Farchione, T.J., Bullis, J.R., Gallagher, M.W., Murray-Latin, H., Sauer-Zavala, S., Bentley, K.H., Thompson-Hollands, J., Conklin, L.R., Boswell, J.F. and Ametaj, A., 2017. The unified protocol for transdiagnostic treatment of emotional

disorders compared with diagnosis-specific protocols for anxiety disorders: A randomized clinical trial. *JAMA psychiatry*, *74*(9), pp.875-884.

13. Bartova, L., Papageorgiou, K., Milenkovic, I., Dold, M., Weidenauer, A., Willeit, M., Winkler, D. and Kasper, S., 2018. Rapid antidepressant effect of S-ketamine in schizophrenia. *European Neuropsychopharmacology*, *28*(8), pp.980-982.
14. Baweja, R., Belin, P.J., Humphrey, H.H., Babocsai, L., Pariseau, M.E., Waschbusch, D.A., Hoffman, M.T., Akinnusi, O.O., Haak, J.L., Pelham, W.E. and Waxmonsky, J.G., 2016. The effectiveness and tolerability of central nervous system stimulants in school-age children with attention-deficit/hyperactivity disorder and disruptive mood dysregulation disorder across home and school. *Journal of child and adolescent psychopharmacology*, *26*(2), pp.154-163.
15. Baweja, R., Mayes, S.D., Hameed, U. and Waxmonsky, J.G., 2016. Disruptive mood dysregulation disorder: current insights. *Neuropsychiatric disease and treatment*.
16. Bayer, R. and Spitzer, R.L., 1985. Neurosis, psychodynamics, and DSM-III: A history of the controversy. *Archives of general psychiatry*, *42*(2), pp.187-196.
17. Bayes, A., Parker, G. and Fletcher, K., 2014. Clinical differentiation of bipolar II disorder from borderline personality disorder. *Current Opinion in Psychiatry*, *27*(1), pp.14-20.
18. Bech, P., 2002. The Bech-Rafaelsen Mania Scale in clinical trials of therapies for bipolar disorder. *CNS drugs*, *16*(1), pp.47-63.
19. Bechdolf, A., Ratheesh, A., Cotton, S.M., Nelson, B., Chanen, A.M., Betts, J., Bingmann, T., Yung, A.R., Berk, M. and McGorry, P.D., 2014. The predictive validity of bipolar at-risk (prodromal) criteria in help-seeking adolescents and young adults: a prospective study. *Bipolar disorders*, *16*(5), pp.493-504.
20. Beck, A.T. and Alford, B.A., 2009. *Depression: Causes and treatment*. University of Pennsylvania Press.
21. Beck, T.J. (2013). A phenomenological analysis of anxiety as experienced in social situations. Journal of Phenomenological Psychology, 44, 179–219.
22. Benazzi, F., 2007. Bipolar disorder—focus on bipolar II disorder and mixed depression. *The Lancet*, *369*(9565), pp.935-945.
23. Benazzi, F., 2022. Various forms of depression. *Dialogues in clinical neuroscience*.

24. Bernet, R., Kern, I. and Marbach, E., 1993. *Introduction to Husserlian phenomenology*. Northwestern University Press.
25. Binswanger, L., Mendel, W.M. and Lyons, J.T., 1958. The Case of Ellen West: An Anthropological-Clinical Study.
26. Blader, J.C. and Carlson, G.A., 2007. Increased rates of bipolar disorder diagnoses among US child, adolescent, and adult inpatients, 1996–2004. *Biological psychiatry*, *62*(2), pp.107-114.
27. Blewett, A.E., 1992. Abnormal subjective time experience in depression. *The British Journal of Psychiatry*, *161*(2), pp.195-200.
28. Block, R.A. and Zakay, D., 1997. Prospective and retrospective duration judgments: A meta-analytic review. *Psychonomic bulletin & review*, *4*(2), pp.184-197.
29. Bourne, C., Aydemir, Ö., Balanzá-Martínez, V., Bora, E., Brissos, S., Cavanagh, J.T.O., Clark, L., Cubukcuoglu, Z., Dias, V.V., Dittmann, S. and Ferrier, I.N., 2013. Neuropsychological testing of cognitive impairment in euthymic bipolar disorder: an individual patient data meta-analysis. *Acta Psychiatrica Scandinavica*, *128*(3), pp.149-162.
30. Bowden, C.L., 2001. Strategies to reduce misdiagnosis of bipolar depression. *Psychiatric Services*, *52*(1), pp.51-55.
31. Bräunig, P., Krüger, S. and Shugar, G., 1998. Prevalence and clinical significance of catatonic symptoms in mania. *Comprehensive psychiatry*, *39*(1), pp.35-46.
32. Brencio, F., 2014. World, time and anxiety. Heidegger's existential analytic and psychiatry. *Folia Medica*, *56*(4), p.297.
33. Brietzke, E., Moreira, C.L.R.L., Duarte, S.V.B., Nery, F.G., Kapczinski, F., Scippa, Â.M. and Lafer, B., 2012. Impact of comorbid migraine on the clinical course of bipolar disorder. *Comprehensive Psychiatry*, *53*(6), pp.809-812.
34. Brown, S., Ramesh, R., Newson, S. and Isaacs, R., 2013. Lifestyle-related cardiovascular risk factors in patients with bipolar disorder. *Progress in Neurology and Psychiatry*, *17*(4), pp.28-33.
35. Brown, T.A. and Barlow, D.H., 2009. A proposal for a dimensional classification system based on the shared features of the DSM-IV anxiety and mood disorders: implications for assessment and treatment. *Psychological assessment*, *21*(3), p.256.
36. Bschor, T., Ising, M., Bauer, M., Lewitzka, U., Skerstupeit, M., Müller-Oerlinghausen, B. and Baethge, C., 2004. Time experience and time judgment in major depression, mania and healthy subjects. A controlled study of 93 subjects. *Acta Psychiatrica Scandinavica*, *109*(3), pp.222-229.

37. Butler, R.W., Mueser, K.T., Sprock, J. and Braff, D.L., 1996. Positive symptoms of psychosis in posttraumatic stress disorder. *Biological Psychiatry*, *39*(10), pp.839-844.
38. Byrne, M., 2001. The concept of informed consent in qualitative research.(Research Corner). *AORN journal*, *74*(3), pp.401-404.
39. Campbell, J. and Ehlert, U., 2012. Acute psychosocial stress: does the emotional stress response correspond with physiological responses?. *Psychoneuroendocrinology*, *37*(8), pp.1111-1134.
40. Carel, H. and Meacham, D., 2013. Phenomenology and naturalism: Editors' introduction. *Royal Institute of Philosophy Supplements*, *72*, pp.1-21.
41. Caricasole, V., Di Bernardo, I., Varinelli, A., Galimberti, C., Zanello, R., Bosi, M., Ketter, T.A., Viganò, C.A. and Dell'Osso, B., 2019. Anxiety disorders anticipate the diagnosis of bipolar disorder in comorbid patients: Findings from an Italian tertiary clinic. *Journal of Affective Disorders*, *257*, pp.376-381.
42. Carnevale, P.J. and Isen, A.M., 1986. The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational behavior and human decision Processes*, *37*(1), pp.1-13.
43. Caspi, A., Houts, R.M., Belsky, D.W., Goldman-Mellor, S.J., Harrington, H., Israel, S., Meier, M.H., Ramrakha, S., Shalev, I., Poulton, R. and Moffitt, T.E., 2014. The p factor: one general psychopathology factor in the structure of psychiatric disorders?. *Clinical psychological science*, *2*(2), pp.119-137.
44. Catalano, T., Dickson, P., Kendall, E., Kuipers, K. and Posner, T.N., 2003. The perceived benefits of the chronic disease self-management program among participants with stroke: A qualitative study. *Australian Journal of Primary Health*, *9*(3), pp.80-89.
45. Chen, G.K. and Whalen, J.J., 1980. Macromodel predictions for EMI in bipolar operational amplifiers. *IEEE Transactions on Electromagnetic Compatibility*, (4), pp.262-265.
46. Church, R.M., Meck, W.H. and Gibbon, J., 1984. Application of scalar timing theory to individual trials. *Journal of Experimental Psychology: Animal Behavior Processes*, *20*(2), p.135.
47. Colom, F., Vieta, E., Tacchi, M.J., Sánchez-Moreno, J. and Scott, J., 2005. Identifying and improving non-adherence in bipolar disorders. *Bipolar disorders*, *7*, pp.24-31.
48. Compton, W.M. and Guze, S.B., 1995. The neo-Kraepelinian revolution in psychiatric diagnosis. *European archives of psychiatry and clinical neuroscience*, *245*(4), pp.196-201.

49. Conway, K.P., Compton, W., Stinson, F.S. and Grant, B.F., 2006. Lifetime comorbidity of DSM-IV mood and anxiety disorders and specific drug use disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of clinical Psychiatry*, *67*(2), pp.247-257.
50. Cooper, R. and Blashfield, R.K., 2016. Re-evaluating DSM-I. *Psychological Medicine*, *46*(3), pp.449-456.
51. Coryell, W., Scheftner, W., Keller, M., Endicott, J., Maser, J. and Klerman, G.L., 1993. The enduring psychosocial consequences of mania and depression. *The American journal of psychiatry*.
52. Cosgrove, L. and Krimsky, S., 2012. A comparison of DSM-IV and DSM-5 panel members' financial associations with industry: a pernicious problem persists. *PLoS Medicine*, *9*(3), p.e1001190.
53. Cowan, H.R. and Mittal, V.A., 2021. Transdiagnostic dimensions of psychiatric comorbidity in individuals at clinical high risk for psychosis: a preliminary study informed by HiTOP. *Frontiers in psychiatry*, *11*, p.614710.
54. Cowan, H.R., Mittal, V.A. and McAdams, D.P., 2021. Narrative identity in the psychosis spectrum: A systematic review and developmental model. *Clinical Psychology Review*, *88*, p.102067.
55. Craig, T.K.J. and Boardman, A.P., 1997. ABC of mental health: Common mental health problems in primary care. *BMJ*, *314*(7094), p.1609.
56. Cristescu, T., Behrman, S., Jones, S.V., Chouliaras, L. and Ebmeier, K.P., 2015. Be vigilant for perinatal mental health problems. *The Practitioner*, *259*(1780), pp.19-23.
57. Crouse, J.J., Carpenter, J.S., Iorfino, F., Lin, T., Ho, N., Byrne, E.M., Henders, A.K., Wallace, L., Hermens, D.F., Scott, E.M. and Wray, N.R., 2021. Schizophrenia polygenic risk scores in youth mental health: preliminary associations with diagnosis, clinical stage and functioning. *BJPsych open*, *7*(2).
58. Crowell, P.A., 2002. Spatially resolved dynamics of localized spin-wave modes in ferromagnetic wires. *Physical review letters*, *89*(27), p.277201.
59. Cuthbert, B.N., 2014. The RDoC framework: facilitating transition from ICD/DSM to dimensional approaches that integrate neuroscience and psychopathology. *World Psychiatry*, *13*(1), pp.28-35.
60. Dagleish, M.P., Martin, S., Steele, P., Finlayson, J., Sisó, S., Hamilton, S., Chianini, F., Reid, H.W., González, L. and Jeffrey, M., 2008. Experimental transmission of bovine spongiform

encephalopathy to European red deer (Cervus elaphus elaphus). *BMC veterinary research*, *4*(1), pp.1-8.

61. Dalgleish, T., Black, M., Johnston, D. and Bevan, A., 2020. Transdiagnostic approaches to mental health problems: Current status and future directions. *Journal of consulting and clinical psychology*, *88*(3), p.179.
62. Damasio, A.R., 1996. The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, *351*(1346), pp.1413-1420.
63. Dastur, D.K., 1959. The pathology of schizophrenia: A historical survey. *AMA Archives of Neurology & Psychiatry*, *81*(5), pp.601-614.
64. De Boor, C. and Golub, G.H., 1978. The numerically stable reconstruction of a Jacobi matrix from spectral data. *Linear Algebra and Its Applications*, *21*(3), pp.245-260.
65. Demazeux, S., 2013. The failure of DSM-V or the victory of the principle of conservatism. *L'Information Psychiatrique*, *89*(4), pp.295-302.
66. Detera-Wadleigh, S.D., Badner, J.A., Berrettini, W.H., Yoshikawa, T., Goldin, L.R., Turner, G., Rollins, D.Y., Moses, T., Sanders, A.R., Karkera, J.D. and Esterling, L.E., 1999. A high-density genome scan detects evidence for a bipolar-disorder susceptibility locus on 13q32 and other potential loci on 1q32 and 18p11. 2. *Proceedings of the National Academy of Sciences*, *96*(10), pp.5604-5609.
67. Dorr, C. and Sathananthan, K., 1976. Treatment of mania with bromocriptine. *British Medical Journal*, *1*(6021), p.1342.
68) Dreyfus, H.L., 1996. The current relevance of Merleau-Ponty's phenomenology of embodiment. *The electronic journal of analytic philosophy*, *4*(4), pp.1-16.
69. Driver-Dunckley, E.D., Noble, B.N., Hentz, J.G., Evidente, V.G., Caviness, J.N., Parish, J., Krahn, L. and Adler, C.H., 2007. Gambling and increased sexual desire with dopaminergic medications in restless legs syndrome. *Clinical neuropharmacology*, *30*(5), pp.249-255.
70. *DSM* (no date) *Psychiatry.org - DSM*. Available at: https://psychiatry.org/dsm5 (Accessed: October 20, 2022).
71. Dumont, C.M., Sheridan, L.M., Besancon, E.K., Blattner, M., Lopes, F., Kassem, L. and McMahon, F.J., 2020. Validity of the Mood Disorder Questionnaire (MDQ) as a screening tool for

bipolar spectrum disorders in anabaptist populations. *Journal of Psychiatric Research*, *123*, pp.159-163.

72. Eaton, N.R., Rodriguez-Seijas, C., Carragher, N. and Krueger, R.F., 2015. Transdiagnostic factors of psychopathology and substance use disorders: a review. *Social psychiatry and psychiatric epidemiology*, *50*(2), pp.171-182.
73. Eich, E., Macaulay, D. and Lam, R.W., 1997. Mania, depression, and mood dependent memory. *Cognition & Emotion*, *11*(5-6), pp.607-618.
74. Ellard, K.K., Deckersbach, T., Sylvia, L.G., Nierenberg, A.A. and Barlow, D.H., 2012. Transdiagnostic treatment of bipolar disorder and comorbid anxiety with the unified protocol: a clinical replication series. *Behavior Modification*, *36*(4), pp.482-508.
75) Elpidorou, A. and Freeman, L., 2015. Affectivity in Heidegger I: Moods and emotions in Being and Time. *Philosophy Compass*, *10*(10), pp.661-671.
76. Feinstein, A., 2007. *The clinical neuropsychiatry of multiple sclerosis*. Cambridge University Press.
77. Feinstein, S.C. and Wolpert, E.A., 1973. Juvenile manic-depressive illness: Clinical and therapeutic considerations. *Journal of the American Academy of Child Psychiatry*.
78. Fernandes, O. and Apóstolo, J., 2018. Caring in palliative care: A phenomenological study of nurses' lived experiences. *Journal of Hospice & Palliative Nursing*, *20*(2), pp.180-186.
79. Fernandez AV. Depression as existential feeling or de-situatedness? Distinguishing structure from mode in psychopathology. Phenomenol Cogn Sci 2014.
80. Fernandez, A.V., 2014. Reconsidering the affective dimension of depression and mania: towards a phenomenological dissolution of the paradox of mixed states. *Journal of Psychopathology*, *20*(4).
81. Fernandez, A.V., 2019. Merleau-Ponty and the foundations of psychopathology. *The Bloomsbury companion to philosophy of psychiatry*, pp.133-154.
82. Foucault, M., Baudot, A. and Couchman, J., 1978. About the concept of the "dangerous individual" in 19th-century legal psychiatry. *International journal of law and psychiatry*, *1*(1), pp.1-18.
83. Foucher, J.R., Gawlik, M., Roth, J.N., de Billy, C.D.C., Jeanjean, L.C., Obrecht, A., Mainberger, O., Clauss, J.M., Elowe, J., Weibel, S. and Schorr, B., 2022. Wernicke-Kleist-Leonhard

phenotypes of endogenous psychoses: a review of their validity. *Dialogues in clinical neuroscience*.

84. Frances, A.J., Kahn, D.A., Carpenter, D., Docherty, J.P. and Donovan, S.L., 1998. The expert consensus guidelines for treating depression in bipolar disorder. *Journal of Clinical Psychiatry*, *59*(4), pp.73-79.
85. Freedman, L.J., Insel, T.R. and Smith, Y., 2000. Subcortical projections of area 25 (subgenual cortex) of the macaque monkey. *Journal of Comparative Neurology*, *421*(2), pp.172-188.
86. Frye, M.A., McElroy, S.L., Prieto, M.L., Harper, K.L., Walker, D.L., Kung, S., Chauhan, M., Crow, S., Sutor, B., Galardy, C.W. and Veldic, M., 2015. Clinical risk factors and serotonin transporter gene variants associated with antidepressant-induced mania. *The Journal of clinical psychiatry*, *76*(2), p.2941.
87. Fuchs T. Corporealized and disembodied minds: a phenomenological view of the body in melancholia and schizophrenia. Philos Psychiatr Psychol 2005;12:95-107. 29
88. Fuchs T. Temporality and psychopathology. Phenomenol Cogn Sci 2013;12:75-104.
89. Fuchs, T. (2010) “Subjectivity and intersubjectivity in psychiatric diagnosis,” Psychopathology, 43(4), pp. 268–274. Available at: https://doi.org/10.1159/000315126.
90. Fuchs T. The phenomenology of body, space, and time in depression. Comprendre 2005;15:108-21. 28
91. Fuchs T. The phenomenology of shame, guilt and the body in body dysmorphic disorder and depression. J Phenomenol Psychol 2003;32:223-43. 27
92. Fuchs, T., 2007. Fragmented selves: Temporality and identity in borderline personality disorder. *Psychopathology*, *40*(6), pp.379-387.
93. Fuchs, T., Messas, G.P. and Stanghellini, G., 2019. More than just description: phenomenology and psychotherapy. *Psychopathology*, *52*(2), pp.63-66.
94. Fuchs T. Fragmented selves: temporality and identity in borderline personality disorder. Psychopathology. 2007;40(6):379-87. doi: 10.1159/000106468. Epub 2007 Jul 25. PMID: 17652950.
95. Fuchs, T. (2017). Intercorporeality and Interaffectivity. Phenomenology and Mind, (11), 194-209. https://doi.org/10.13128/Phe_Mi-20119
96. Fuchs, T., Messas, G.P. and Stanghellini, G., 2019. More than just description: phenomenology and psychotherapy. *Psychopathology*, *52*(2), pp.63-66.

97. Fuchs, T., Messas, G.P. and Stanghellini, G., 2019. More than just description: phenomenology and psychotherapy. *Psychopathology*, *52*(2), pp.63-66
98. Fuchs, T., Breyer, T. and Mundt, C. eds., 2013. *Karl Jaspers' philosophy and psychopathology*. Springer Science & Business Media.
99. Fuchs, T., 2020. Time, the Body, and the Other in Phenomenology and Psychopathology. *Time and Body: Phenomenological and Psychopathological Approaches*, pp.12-40.
100. Fusar-Poli, P., Borgwardt, S., Bechdolf, A., Addington, J., Riecher-Rössler, A., Schultze-Lutter, F., Keshavan, M., Wood, S., Ruhrmann, S., Seidman, L.J. and Valmaggia, L., 2013. The psychosis high-risk state: a comprehensive state-of-the-art review. *JAMA psychiatry*, *70*(1), pp.107-120.
101. Gale, D., 1968. Optimal assignments in an ordered set: an application of matroid theory. *Journal of Combinatorial Theory*, *4*(2), pp.176-180.
102. Gallagher, S. (1997). Mutual enlightenment: recent phenomenology in cognitive science. Journal of Consciousness Studies 4(3): 195–214.
103. Gallagher, S. (2005). How the body shapes the mind. New York: Oxford University Press.
104. Gallagher, S., and Zahavi, D. (2012). The Phenomenological Mind, 2nd edn. London: Routledge.
105. Geller, B., Zimerman, B., Williams, M., DelBello, M.P., Frazier, J. and Beringer, L., 2002. Phenomenology of prepubertal and early adolescent bipolar disorder: examples of elated mood, grandiose behaviors, decreased need for sleep, racing thoughts and hypersexuality. *Journal of child and adolescent psychopharmacology*, *12*(1), pp.3-9.
106. Géraud, M., 1997. Emil Kraepelin and bipolar disorder: invention or over-extension?. *L'encephale*, *23*, pp.12-19.
107. Ghaemi, S.N., Angst, J., Vohringer, P.A., Youngstrom, E.A., Phelps, J., Mitchell, P.B., McIntyre, R.S., Bauer, M., Vieta, E. and Gershon, S., 2022. Clinical research diagnostic criteria for bipolar illness (CRDC-BP): rationale and validity. *International Journal of Bipolar Disorders*, *10*(1), pp.1-16.
108. Giorgi, A. (2009). The descriptive phenomenological method in psychology: A modified Husserlian approach. Pittsburgh: Duquesne University Press.
109. Giorgi, A. (2012). The descriptive phenomenological psychological method. Journal of Phenomenological Psychology 43: 3–12.

110. Giorgi, A. (Ed.). (1985). Phenomenology and psychological research. Pittsburgh, PA: Duquesne, University Press.
111. Giorgi, B. (2006). Can an empirical psychology be drawn from Husserl's phenomenology? In Ashworth, P.D., Chung, M.C. (eds.): Phenomenology and Psychological Science: Historical and Philosophical Perspectives (pp. 69-88). New York: Springer.
112. Giorgi, A. (Ed.). (1985). Phenomenology and psychological research. Pittsburgh, PA: Duquesne University Press.
113. Giorgi, A. (1986). Theoretical justification for the use of descriptions in psychological research. In P. Ashworth, A. Giorgi, & A. deKoning (Eds.), Qualitative research in psychology (pp. 3–22). Pittsburgh, PA: Duquesne University Press
114. Giorgi, A., Giorgi, B. and Morley, J. (2017) The Descriptive Phenomenological Psychological Method. In: Willig, C. and Stainton Rogers, W., Eds., The Sage Handbook of Qualitative Research in Psychology, 2nd Edition, Sage, Thousand Oaks, 176-192.
115. Goetz, I., Tohen, M., Reed, C., Lorenzo, M., Vieta, E. and EMBLEM Advisory Board, 2007. Functional impairment in patients with mania: baseline results of the EMBLEM study. *Bipolar disorders*, *9*(1-2), pp.45-52.
116. Goldberg, J.F. and Truman, C.J., 2003. Antidepressant-induced mania: an overview of current controversies. *Bipolar disorders*, *5*(6), pp.407-420.
117. Goldstein-Piekarski, A.N., Williams, L.M. and Humphreys, K., 2016. A trans-diagnostic review of anxiety disorder comorbidity and the impact of multiple exclusion criteria on studying clinical outcomes in anxiety disorders. *Translational psychiatry*, *6*(6), pp.e847-e847.
118. Goldstein, B.I., Birmaher, B., Carlson, G.A., DelBello, M.P., Findling, R.L., Fristad, M., Kowatch, R.A., Miklowitz, D.J., Nery, F.G., Perez-Algorta, G. and Van Meter, A., 2017. The International Society for Bipolar Disorders Task Force report on pediatric bipolar disorder: Knowledge to date and directions for future research. *Bipolar disorders*.
119. Gomboso, M., 2018. Husserl and the Possibility of Solipsism. *Humanities Bulletin*, *1*(1), pp.63-69.
120) Gorden, R.W., Beyers, R.J., Odum, E.P. and Eagon, R.G., 1969. Studies of a simple laboratory microecosystem: bacterial activities in a heterotrophic succession. *Ecology*, *50*(1), pp.86-100.
121. Grondin, S., 1992. Methods for studying psychological time. *Psychology of time*, pp.51-74.

122. Gruber, J., Johnson, S.L., Oveis, C. and Keltner, D., 2008. Risk for mania and positive emotional responding: too much of a good thing?. *Emotion*, *8*(1), p.23.
123. Grunebaum, M.F., Ellis, S.P., Keilp, J.G., Moitra, V.K., Cooper, T.B., Marver, J.E., Burke, A.K., Milak, M.S., Sublette, M.E., Oquendo, M.A. and Mann, J.J., 2017. Ketamine versus midazolam in bipolar depression with suicidal thoughts: A pilot midazolam-controlled randomized clinical trial. *Bipolar disorders*, *19*(3), pp.176-183.
124. Gunderson, J.G. and Singer, M.T., 1975. Defining borderline patients: an overview. *The American Journal of Psychiatry*.
125. Guo, F., Cai, J., Jia, Y., Wang, J., Jakšić, N., Kövi, Z., Šagud, M. and Wang, W., 2020. Symptom continuum reported by affective disorder patients through a structure-validated questionnaire. *BMC psychiatry*, *20*(1), pp.1-9.
126. Guscott, R. and Taylor, L., 1994. Lithium prophylaxis in recurrent affective illness: efficacy, effectiveness and efficiency. *The British Journal of Psychiatry*, *164*(6), pp.741-746.
127. Häfner, H., 2022. Descriptive psychopathology, phenomenology, and the legacy of Karl Jaspers. *Dialogues in clinical neuroscience*.
128. Häfner, H., an der Heiden, W., Behrens, S., Gattaz, W.F., Hambrecht, M., Löffler, W., Maurer, K., Munk-Jørgensen, P., Nowotny, B., Riecher-Rössler, A. and Stein, A., 1998. Causes and consequences of the gender difference in age at onset of schizophrenia. *Schizophrenia Bulletin*, *24*(1), pp.99-113.
129. Hare-Mustin, R.T. and Marecek, J., 1986. Autonomy and gender: Some questions for therapists. *Psychotherapy: Theory, Research, Practice, Training*, *23*(2), p.205.
130. Hartocollis, P., 1972. Time as a dimension of affects. *Journal of the American Psychoanalytic Association*, *20*(1), pp.92-108.
131. Harvey, P.D., 1985. Reality monitoring in mania and schizophrenia: The association of thought disorder and performance. *Journal of Nervous and Mental Disease*.
132) Hatfield, G., 1995. Remaking the science of mind: Psychology as a natural science.
133. Hayes, J.F., Miles, J., Walters, K., King, M. and Osborn, D.P.J., 2015. A systematic review and meta-analysis of premature mortality in bipolar affective disorder. *Acta Psychiatrica Scandinavica*, *131*(6), pp.417-425.
134. Hayes, S.C. and Hofmann, S.G., 2017. The third wave of cognitive behavioral therapy and the rise of process-based care. *World psychiatry*, *16*(3), p.245.

135. Heavey, C., Hurlburt, R. and Lefforge, N., 2012. Toward a phenomenology of feelings. *Emotion*, 12(4), pp.763-777. Heidegger fuchs zahavi sass Gallagher aho
136. Heidegger, M. (1985 [1925]). History of the Concept of Time: Prolegomena, trans. T. Kisiel. Bloomington, IN: Indiana University Press.
137. Heidegger, M. (1995 [1929-1930]). The Fundamental Concepts of Metaphysics: World, Finitude, Solitude, trans. by W. McNeill & N. Walker. Bloomington: Indiana University Press.
138. Heidegger, M. (1995 [1929-1930]). The Fundamental Concepts of Metaphysics: World, Finitude, Solitude, trans. by W. McNeill & N. Walker. Bloomington: Indiana University Press.
139. Heidegger, M. (1996 [1927]). Being and Time, trans. J. Stambaugh. Albany, NY: SUNY.
140. Heidegger, M. (1996 [1927]). Being and Time, trans. J. Stambaugh. Albany, NY: SUNY
141) Heidegger, M. and Gendlin, E.T., 1967. *What is a Thing?* (pp. 165-186). Lanham: University Press of America.
142. Heinämaa, S. and Taipale, J., 2018. Normality. *The Oxford Handbook of Phenomenological Psychopathology*.
143. Henry, C., Sorbara, F., Lacoste, J., Gindre, C. and Leboyer, M., 2001. Antidepressant-induced mania in bipolar patients: identification of risk factors. *Journal of Clinical Psychiatry*, *62*(4), pp.249-255.
144. Ho, L.N., Chung, J.P. and Choy, K.L., 2010. Oseltamivir-induced mania in a patient with H1N1. *American Journal of Psychiatry*, *167*(3), pp.350-350.
145. Hoff, A.L., Shukla, S., Aronson, T., Cook, B., Ollo, C., Baruch, S., Jandorf, L. and Schwartz, J., 1990. Failure to differentiate bipolar disorder from schizophrenia on measures of neuropsychological function. *Schizophrenia Research*, *3*(4), pp.253-260.
146. Hollon, S.D., Kendall, P.C. and Lumry, A., 1986. Specificity of depressotypic cognitions in clinical depression. *Journal of abnormal psychology*, *95*(1), p.52.
147. Holmes, E.A., Geddes, J.R., Colom, F. and Goodwin, G.M., 2008. Mental imagery as an emotional amplifier: Application to bipolar disorder. *Behaviour research and therapy*, *46*(12), pp.1251-1258.
148. Hooley, J.M. and Hiller, J.B., 1997. Family relationships and major mental disorder: Risk factors and preventive strategies.
149. Hunsley, J., Lee, C.M., Wood, J.M. and Taylor, W., 2015. Controversial and questionable assessment techniques.

150. Husserl, E. (1960 [1931]). Cartesian Meditations: An Introduction to Phenomenology, trans. D. Cairns. The Hague: Martinus Nijhoff. doi.org/10.1007/978-94-017-4952-7
151. Husserl, E. (1970 [1936]). The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy, trans. D. Carr. Evanston, IL: Northwestern University Press.
152. Husserl, E. (1982 [1913]). Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. First Book. General Introduction to a Pure Phenomenology, trans. F. Kersten. The Hague: Martinus Nijhoff.
153. Husserl, E. (1991). On the Phenomenology of the Consciousness of Internal Time (1893–1917), trans. J. B. Brough. Dordrecht: Kluwer Academic. doi.org/10.1007/978-94-011-3718-8
154. Husserl, Edmund. Cartesianische Meditationen: Eine Einführung in die Phänomenologie. In: *Gesammelte Schriften*, v. 8, edited by Elisabeth Ströker. Hamburg: Meiner, 1992 [1931]. p. 1-161.
155. Husserl, E. (2001 [1900-1901]). Logical Investigations I-II, trans. J. N. Findlay. London: Routledge.
156. Husserl, E. (2014). Grenzprobleme der Phänomenologie. Analysen des Unbewusstseins und der Instinkte. Metaphysik. Späte Ethik. Texte aus dem Nachlass 1908–1937, ed. R. Sowa and T. Vongehr. Husserliana 42. New York: Springer.
157. Italian Collaborative Group for the Study of Psychopathological Factors in Primary Headaches, Puca, F., Genco, S., Prudenzano, M.P., Savarese, M., Bussone, G., D'Amico, D., Cerbo, R., Gala, C., Coppola, M.T. and GalIai, V., 1999. Psychiatric comorbidity and psychosocial stress in patients with tension-type headache from headache centers in Italy. *Cephalalgia*, *19*(3), pp.159-164.
158. James, W., 1984. *Psychology, briefer course* (Vol. 14). Harvard University Press.
159. Janesick, A. and Blumberg, B., 2011. Endocrine disrupting chemicals and the developmental programming of adipogenesis and obesity. *Birth Defects Research Part C: Embryo Today: Reviews*, *93*(1), pp.34-50.
160. Jaspers, K., 1997. General psychopathology (Vol. 2). JHU Press.
161. Johnson, S.L., Cueller, A.K., Ruggero, C., Winett-Perlman, C., Goodnick, P., White, R. and Miller, I., 2008. Life events as predictors of mania and depression in bipolar I disorder. *Journal of abnormal psychology*, *117*(2), p.268.

162. Johnson, S.L., Madole, J.W. and Freeman, M.A., 2018. Mania risk and entrepreneurship: Overlapping personality traits. *Academy of Management Perspectives*, *32*(2), pp.207-227.
163. Johnston-Wilson, N.L., Sims, C.D., Hofmann, J.P., Anderson, L., Shore, A.D., Torrey, E.F. and Yolken, R.H., 2000. Disease-specific alterations in frontal cortex brain proteins in schizophrenia, bipolar disorder, and major depressive disorder. *Molecular psychiatry*, *5*(2), pp.142-149.
164. Joslyn, C., Hawes, D.J., Hunt, C. and Mitchell, P.B., 2016. Is age of onset associated with severity, prognosis, and clinical features in bipolar disorder? A meta-analytic review. *Bipolar disorders*, *18*(5), pp.389-403.
165. Judd, L.L., Schettler, P.J., Akiskal, H.S., Maser, J., Coryell, W., Solomon, D., Endicott, J. and Keller, M., 2003. Long-term symptomatic status of bipolar I vs. bipolar II disorders. *International Journal of Neuropsychopharmacology*, *6*(2), pp.127-137.
166. Jung, H.Y., Cho, H.S., Joo, Y.H., Shin, H.K., Yi, J.S., Hwang, S. and Kim, Y.S., 2003. A validation study of the Korean-version of the Young Mania Rating Scale. *Journal of Korean Neuropsychiatric Association*, *42*(2), pp.263-269.
167. Kant, I. and Kroeger, A.E., 1881. KANT'S ANTHROPOLOGY (Continued). *The Journal of Speculative Philosophy*, *15*(1), pp.62-66.
168. Kawa, S. and Giordano, J., 2012. A brief historicity of the Diagnostic and Statistical Manual of Mental Disorders: issues and implications for the future of psychiatric canon and practice. *Philosophy, Ethics, and Humanities in Medicine*, *7*(1), pp.1-9.
169. Keck Jr, P.E., McElroy, S.L., Strakowski, S.M., Stanton, S.P., Kizer, D.L., Balistreri, T.M., Bennett, J.A., Tugrul, K.C. and West, S.A., 1996. Factors associated with pharmacologic noncompliance in patients with mania. *The Journal of clinical psychiatry*, *57*(7), pp.292-297.
170. Kleisiaris, C.F., Sfakianakis, C. and Papathanasiou, I.V., 2014. Health care practices in ancient Greece: The Hippocratic ideal. *Journal of medical ethics and history of medicine*, *7*.
171. Kelberman, C., Biederman, J., Green, A., Spera, V., Maiello, M. and Uchida, M., 2021. Differentiating bipolar disorder from unipolar depression in youth: a systematic literature review of neuroimaging research studies. *Psychiatry Research: Neuroimaging*, *307*, p.111201.
172. Keller, M.B., Lavori, P.W., Coryell, W., Andreasen, N.C., Endicott, J., Clayton, P.J., Klerman, G.L. and Hirschfeld, R.M.,

1986. Differential outcome of pure manic, mixed/cycling, and pure depressive episodes in patients with bipolar illness. *Jama*, *255*(22), pp.3138-3142.

173. Kendler, K.S., 2017. The clinical features of mania and their representation in modern diagnostic criteria. *Psychological medicine*, *47*(6), pp.1013-1029.

174. Kessing, Lars Vedel, Ana González-Pinto, Andrea Fagiolini, Andreas Bechdolf, Andreas Reif, Ayşegül Yildiz, Bruno Etain et al. "DSM-5 and ICD-11 criteria for bipolar disorder: Implications for the prevalence of bipolar disorder and validity of the diagnosis–A narrative review from the ECNP bipolar disorders network." *European Neuropsychopharmacology* 47 (2021): 54-61.

175. Kessler, R.C., Avenevoli, S. and Merikangas, K.R., 2001. Mood disorders in children and adolescents: an epidemiologic perspective. *Biological psychiatry*, *49*(12), pp.1002-1014.

176. Khoury, B., Langer, E.J. and Pagnini, F., 2014. The DSM: mindful science or mindless power? A critical review. *Frontiers in psychology*, *5*, p.602.

177. Kitamura, T. and Kumar, R., 1982. Time passes slowly for patients with depressive state. *Acta psychiatrica scandinavica*, *65*(6), pp.415-420.

178. Klein, P. and Westcott, M.R., 1994. The changing character of phenomenological psychology. *Canadian Psychology/Psychologie canadienne*, *35*(2), p.133.

179. Kotov, R., Leong, S.H., Mojtabai, R., Erlanger, A.C.E., Fochtmann, L.J., Constantino, E., Carlson, G.A. and Bromet, E.J., 2013. Boundaries of schizoaffective disorder: revisiting Kraepelin. *JAMA psychiatry*, *70*(12), pp.1276-1286.

180. Kotov, R., Ruggero, C.J., Krueger, R.F., Watson, D., Yuan, Q. and Zimmerman, M., 2011. New dimensions in the quantitative classification of mental illness. *Archives of general psychiatry*, *68*(10), pp.1003-1011.

181. Kouros, C.D., Quasem, S. and Garber, J., 2013. Dynamic temporal relations between anxious and depressive symptoms across adolescence. *Development and psychopathology*, *25*(3), pp.683-697.

182. Kronmüller, K.T., Saha, R., Kratz, B., Karr, M., Hunt, A., Mundt, C. and Backenstrass, M., 2008. Reliability and validity of the Knowledge about Depression and Mania Inventory. *Psychopathology*, *41*(2), pp.69-76.

183. Krueger, R.F. and Eaton, N.R., 2015. Transdiagnostic factors of mental disorders. *World Psychiatry*, *14*(1), p.27.

184. Kuhs, H. and Reschke, D., 1992. Psychomotor activity in unipolar and bipolar depressive patients. *Psychopathology*, *25*(2), pp.109-116.
185. Lahey, B.B., Zald, D.H., Perkins, S.F., Villalta-Gil, V., Werts, K.B., Van Hulle, C.A., Rathouz, P.J., Applegate, B., Class, Q.A., Poore, H.E. and Watts, A.L., 2018. Measuring the hierarchical general factor model of psychopathology in young adults. *International journal of methods in psychiatric research*, *27*(1), p.e1593.
186. Landis, C., Zubin, J. and Katz, S.E., 1935. Empirical evaluation of three personality adjustment inventories. *Journal of Educational Psychology*, *26*(5), p.321.
187. Lang, P.J., Bradley, M.M. and Cuthbert, B.N., 1998. Emotion, motivation, and anxiety: Brain mechanisms and psychophysiology. *Biological psychiatry*, *44*(12), pp.1248-1263.
188. Lang, P.J., Bradley, M.M. and Cuthbert, B.N., 1998. Emotion, motivation, and anxiety: Brain mechanisms and psychophysiology. *Biological psychiatry*, *44*(12), pp.1248-1263.
189. Lazarus, R.S., 1991. Cognition and motivation in emotion. *American psychologist*, *46*(4), p.352.
190. Leader, G., Flynn, C., O'Rourke, N., Coyne, R., Caher, A. and Mannion, A., 2021. Comorbid psychopathology, challenging behavior, sensory issues, adaptive behavior and quality of life in children and adolescents with autism spectrum disorder. *Developmental Neurorehabilitation*, *24*(6), pp.397-407.
191. Ledermann, E.K., 1972. Lived Time: Phenomenological and Psychopathological Studies, by Eugène Minkowski.
192. Lenzo, E.A. and Gallagher, S., 2020. Commentary on "Lost in the Socially Extended Mind: Genuine Intersubjectivity and Disturbed Self-Other Demarcation in Schizophrenia". *Time and Body: Phenomenological and Psychopathological Approaches*, p.341.
193. Lenzo, E.A. and Gallagher, S., 2020. Intrinsic Temporality in Depression. *Time and Body: Phenomenological and Psychopathological Approaches*, *289*.
194. León, F., Zandersen, M., Meindl, P. and Zahavi, D., 2022. The Distinction Between Second-Person and Third-Person Relations and Its Relevance for the Psychiatric Diagnostic Interview. In *The Clinician in the Psychiatric Diagnostic Process* (pp. 51-69). Springer, Cham.
195. Lewinsohn, P.M., Klein, D.N. and Seeley, J.R., 1995. Bipolar disorders in a community sample of older adolescents: prevalence,

phenomenology, comorbidity, and course. *Journal of the American Academy of Child & Adolescent Psychiatry*, *34*(4), pp.454-463.

196. Lewinsohn, P.M., Zinbarg, R., Seeley, J.R., Lewinsohn, M. and Sack, W.H., 1997. Lifetime comorbidity among anxiety disorders and between anxiety disorders and other mental disorders in adolescents. *Journal of anxiety disorders*, *11*(4), pp.377-394.

197. Lewis-Fernández, R., Aggarwal, N.K., Bäärnhielm, S., Rohlof, H., Kirmayer, L.J., Weiss, M.G., Jadhav, S., Hinton, L., Alarcón, R.D., Bhugra, D. and Groen, S., 2014. Culture and psychiatric evaluation: operationalizing cultural formulation for DSM-5. *Psychiatry*, *77*(2), pp.130-154.

198. Lewis, J.L. and Winokur, G., 1982. The induction of mania: a natural history study with controls. *Archives of General Psychiatry*, *39*(3), pp.303-306.

199) Lo Iacono, V., Symonds, P. and Brown, D.H., 2016. Skype as a tool for qualitative research interviews. *Sociological research online*, *21*(2), pp.103-117.

200. Luft 2012. Diagnostic and prognostic stratification in the emergency department using urinary biomarkers of nephron damage: a multicenter prospective cohort study. *Journal of the American College of Cardiology*, *59*(3), pp.246-255.

201. Luft, S. and Overgaard, S. eds., 2011. *The Routledge companion to phenomenology* (p. 71). New York: Routledge.

202. MacKinnon, D.F. and Pies, R., 2006. Affective instability as rapid cycling: theoretical and clinical implications for borderline personality and bipolar spectrum disorders. *Bipolar disorders*, *8*(1), pp.1-14.

203. Malhi, G.S., Tanious, M., Das, P., Coulston, C.M. and Berk, M., 2013. Potential mechanisms of action of lithium in bipolar disorder. *CNS drugs*, *27*(2), pp.135-153.

204. Malhi, G.S., Tanious, M., Das, P., Coulston, C.M. and Berk, M., 2013. Potential mechanisms of action of lithium in bipolar disorder. *CNS drugs*, *27*(2), pp.135-153.

205. Martin, E., 2009. Bipolar expeditions. In *Bipolar Expeditions*. Princeton University Press.

206. Martin, W., Gergel, T. and Owen, G.S., 2019. Manic temporality. *Philosophical Psychology*, *32*(1), pp.72-97.

207. Martino, M., Magioncalda, P., Huang, Z., Conio, B., Piaggio, N., Duncan, N.W., Rocchi, G., Escelsior, A., Marozzi, V., Wolff, A. and Inglese, M., 2016. Contrasting variability patterns in the default mode and sensorimotor networks balance in bipolar depression

and mania. *Proceedings of the National Academy of Sciences*, *113*(17), pp.4824-4829.

208. Mauss, I., Wilhelm, F. and Gross, J., 2004. Is there less to social anxiety than meets the eye? Emotion experience, expression, and bodily responding. *Cognition and emotion*, *18*(5), pp.631-642.

209. McEvoy, J.P. and Allen, T.B., 2002. The importance of nicotinic acetylcholine receptors in schizophrenia, bipolar disorder and Tourette's syndrome. *Current Drug Targets-CNS & Neurological Disorders*, *1*(4), pp.433-442.

210. McGrath, J., Chapple, B. and Wright, M., 2001. Working memory in schizophrenia and mania: correlation with symptoms during the acute and subacute phases. *Acta Psychiatrica Scandinavica*, *103*(3), pp.181-188.

211) McIntyre, R.S., Young, A.H. and Haddad, P.M., 2018. Rethinking the spectrum of mood disorders: implications for diagnosis and management–Proceedings of a symposium presented at the 30th Annual European College of Neuropsychopharmacology Congress, 4 September 2017, Paris, France. *Therapeutic Advances in Psychopharmacology*, *8*(1_suppl), pp.1-16.

212. Merleau-Ponty, M. (2012). Phenomenology of Perception, trans. D. A. Landes. London: Routledge

213. Merleau-Ponty, M., 1963. *Cezanne's Doubt Maurice Merleau-Ponty* (pp. 9-25). Evanston, Ill.: Northwestern University Press.

214. Merleau-Ponty, M., 2014. *Maurice Merleau-Ponty: Basic Writings*. Psychology Press.

215. Merrow, M., Spoelstra, K. and Roenneberg, T., 2005. The circadian cycle: daily rhythms from behaviour to genes: First in the Cycles Review Series. *EMBO reports*, *6*(10), pp.930-935.

216. Messas, G., Tamelini, M., Mancini, M. and Stanghellini, G., 2018. New perspectives in phenomenological psychopathology: its use in psychiatric treatment. *Frontiers in Psychiatry*, p.466.

217) Metzinger, T. ed., 1995. *Conscious experience*. Imprint Academic.

218. Mezey, A.G., Cohen, S.I. and Knight, E.J., 1963. Personality assessment under varying physiological and psychological conditions. *Journal of Psychosomatic Research*, *7*(3), pp.237-240.

219. Michelini, G., Kitsune, V., Vainieri, I., Hosang, G.M., Brandeis, D., Asherson, P. and Kuntsi, J., 2018. Shared and disorder-specific event-related brain oscillatory markers of

attentional dysfunction in ADHD and bipolar disorder. *Brain topography*, *31*(4), pp.672-689.

220. Milbank, J., 2020. The Confession of Time in Augustine. *Maynooth Philosophical Papers*, *10*, pp.5-56.
221. Miles, M.B., Huberman, A.M. and Saldaña, J., 2014. *Qualitative data analysis: A methods sourcebook*. Sage publications.
222. Miller, W.R. and Seligman, M.E., 1975. Depression and learned helplessness in man. *Journal of abnormal psychology*, *84*(3), p.228.
223. Minkowski, E. (1970). Lived Time: Phenomenological and Psychopathological Studies, trans. N. Metzel. Evanston: Northwestern University Press.
224. Mitchell, P.B., Slade, T. and Andrews, G., 2004. Twelve-month prevalence and disability of DSM-IV bipolar disorder in an Australian general population survey. *Psychological medicine*, *34*(5), pp.777-785.
225. Moran, D., 2008. Husserl's transcendental philosophy and the critique of naturalism. *Continental Philosophy Review*, *41*(4), pp.401-425.
226. Moran, D., 2001. Introduction to Phenomenology, Robert Sokolowski.
227. Morey, L.C. and Blashfield, R.K., 1981. A symptom analysis of the DSM-III definition of schizophrenia. *Schizophrenia Bulletin*, *7*(2), p.258.
228. Moskalewicz, M. and Schwartz, M.A., 2020. Temporal experience in mania. *Phenomenology and the Cognitive Sciences*, *19*(2), pp.291-304.
229. Moskalewicz, M. and Schwartz, M.A., 2020. Temporal experience in mania. *Phenomenology and the Cognitive Sciences*, *19*(2), pp.291-304.
230. Myers, H.F., Lesser, I., Rodriguez, N., Mira, C.B., Hwang, W.C., Camp, C., Anderson, D., Lucy, E. and Wohl, M., 2002. Ethnic differences in clinical presentation of depression in adult women. *Cultural Diversity and Ethnic Minority Psychology*, *8*(2), p.138.
231. National Institute of Mental Health (NIMH). 2022. *Research Domain Criteria (RDoC)*. [online] Available at: <https://www.nimh.nih.gov/research/research-funded-by-nimh/rdoc> [Accessed 17 October 2022].
232. Nenon, T.J., 2008. Some differences between Kant's and Husserl's conceptions of transcendental philosophy. *Continental philosophy review*, *41*(4), pp.427-439.

233. Nestler, E.J. and Hyman, S.E., 2010. Animal models of neuropsychiatric disorders. *Nature neuroscience*, *13*(10), pp.1161-1169.
234. Niculescu, A.B., Levey, D.F., Phalen, P.L., Le-Niculescu, H., Dainton, H.D., Jain, N., Belanger, E., James, A., George, S., Weber, H. and Graham, D.L., 2015. Understanding and predicting suicidality using a combined genomic and clinical risk assessment approach. *Molecular psychiatry*, *20*(11), pp.1266-1285.
235. Nordgaard, J., Revsbech, R., SæBYE, D.I.T.T.E. and Parnas, J., 2012. Assessing the diagnostic validity of a structured psychiatric interview in a first-admission hospital sample. *World Psychiatry*, *11*(3), p.181.
236. Northoff, G., Magioncalda, P., Martino, M., Lee, H.C., Tseng, Y.C. and Lane, T., 2018. Too fast or too slow? Time and neuronal variability in bipolar disorder—a combined theoretical and empirical investigation. *Schizophrenia bulletin*, *44*(1), pp.54-64.
237. Osborne, J.W., 1994. Some similarities and differences among phenomenological and other methods of psychological qualitative research. *Canadian Psychology/Psychologie Canadienne*, *35*(2), p.167.
238) Osório, F.L., 2017. Bipolar disorder and early emotional trauma: a critical literature review on indicators of prevalence rates and clinical outcomes. *Harvard review of psychiatry*, *25*(5), pp.198-208.
239. Pacchiarotti, I., Bond, D.J., Baldessarini, R.J., Nolen, W.A., Grunze, H., Licht, R.W., Post, R.M., Berk, M., Goodwin, G.M., Sachs, G.S. and Tondo, L., 2013. The International Society for Bipolar Disorders (ISBD) task force report on antidepressant use in bipolar disorders. *American Journal of Psychiatry*, *170*(11), pp.1249-1262.
240. Pacchiarotti, I., Mazzarini, L., Kotzalidis, G.D., Valentí, M., Nivoli, A.M., Sani, G., Torrent, C., Murru, A., Sanchez-Moreno, J., Patrizi, B. and Girardi, P., 2011. Mania and depression. Mixed, not stirred. *Journal of affective disorders*, *133*(1-2), pp.105-113.
241. Papineau, D., 2003. Could there be a science of consciousness?. *Philosophical Issues*, *13*, pp.205-220.
242. Park, Y.M., 2018. The mixed-features specifier of major depressive disorder in DSM-5: is it practical?. *Psychiatry Investigation*, *15*(11), p.1009.
243. Paris, J., Gunderson, J. and Weinberg, I., 2007. The interface between borderline personality disorder and bipolar spectrum disorders. *Comprehensive psychiatry*, *48*(2), pp.145-154.

244. Paris, J., 2004. Borderline or bipolar? Distinguishing borderline personality disorder from bipolar spectrum disorders. *Harvard Review of Psychiatry*, *12*(3), pp.140-145.
245) Park, Y.M., 2018. The mixed-features specifier of major depressive disorder in DSM-5: is it practical?. *Psychiatry Investigation*, *15*(11), p.1009.
246. Parnas, J. and Gallagher, S., 2015. Phenomenology and the interpretation of psychopathological experience. *Re-visioning psychiatry: Cultural phenomenology, critical neuroscience, and global mental health*, pp.65-80.
247. Parnas, J. and Sass, L.A., 2008. Varieties of 'Phenomenology'. *Philosophical issues in psychiatry: Explanation, phenomenology, and nosology*, p.239.
248. Parnas, J. and Zahavi, D., 2002. The role of phenomenology in psychiatric diagnosis and classification. *Psychiatric diagnosis and classification*, *15*, pp.137-62.
249. Parnas, J., Bovet, P. and Zahavi, D., 2002. Schizophrenic autism: clinical phenomenology and pathogenetic implications. *World Psychiatry*, *1*(3), p.131.
250. Parnas, J., Møller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., and Zahavi, D. (2005). EASE: examination of anomalous self-experience. Psychopathology 38: 236–58.
251. Parnas, J., Møller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., and Zahavi, D. (2005). EASE: examination of anomalous self-experience. Psychopathology 38: 236–58.
252. Parnas, J., Sass, L.A. and Zahavi, D., 2008. Recent developments in philosophy of psychopathology. *Current opinion in psychiatry*, *21*(6), pp.578-584.
253. Pélicier, Y., 1981. La personalidad maníaca. *Psicopatología*.
254. Pereira, C., Chavarria, V., Vian, J., Ashton, M.M., Berk, M., Marx, W. and Dean, O.M., 2018. Mitochondrial agents for bipolar disorder. *International journal of neuropsychopharmacology*, *21*(6), pp.550-569.
255. Perez Algorta, G., MacPherson, H.A., Youngstrom, E.A., Belt, C.C., Arnold, L.E., Frazier, T.W., Taylor, H.G., Birmaher, B., Horwitz, S.M., Findling, R.L. and Fristad, M.A., 2018. Parenting stress among caregivers of children with bipolar spectrum disorders. *Journal of Clinical Child & Adolescent Psychology*, *47*(sup1), pp.S306-S320.
256. Perich, T., Ussher, J. and Meade, T., 2017. Menopause and illness course in bipolar disorder: A systematic review. *Bipolar disorders*, *19*(6), pp.434-443.

257. Perugi G, Akiskal HS, Micheli C, et al. Clinical subtypes of bipolar mixed states: validating a broader European definition in 143 cases. J Affect Disord 1997;43:169-80. 21
258. Perugi G, Medda P, Reis J, et al. Clinical subtypes of severe bipolar mixed states. J Affect Disord 2013;151:1076-82. 22
259. Perugi G, Quaranta G, Dell'Osso L. The significance of mixed states in depression and mania. Curr Psychiatry Rep 2014;16:486.
260. Phelps, J.R. and Ghaemi, S.N., 2006. Improving the diagnosis of bipolar disorder: predictive value of screening tests. *Journal of affective disorders*, *92*(2-3), pp.141-148.
261. Pichot, P., 1995. The birth of the bipolar disorder. *European Psychiatry*, *10*(1), pp.1-10.
262. Polkinghome, D., 1983. Methodology for the social sciences: Systems of inquiry.
263. Poppel., Machado, S., Paes, F., Velasques, B., Guilherme Silva, J., L Sanfim, A., Minc, D., Anghinah, R., L Menegaldo, L., Salama, M. and Cagy, M., 2013. Time perception distortion in neuropsychiatric and neurological disorders. *CNS & Neurological Disorders-Drug Targets (Formerly Current Drug Targets-CNS & Neurological Disorders)*, *12*(5), pp.567-582.
264. Potuzak, M., Ravichandran, C., Lewandowski, K.E., Ongür, D. and Cohen, B.M., 2012. Categorical vs dimensional classifications of psychotic disorders. *Comprehensive psychiatry*, *53*(8), pp.1118-1129.
265. Prati, F., Buonfiglio, R., Furlotti, G., Cavarischia, C., Mangano, G., Picollo, R., Oggianu, L., di Matteo, A., Olivieri, S., Bovi, G. and Porceddu, P.F., 2020. Optimization of Indazole-based GSK-3 inhibitors with mitigated hERG issue and in vivo activity in a mood disorder model. *ACS medicinal chemistry letters*, *11*(5), pp.825-831.
266. Prien, R.F. and Potter, W.Z., 1990. NIMH workshop report on treatment of bipolar disorder. *Psychopharmacology Bulletin*, *26*(4), pp.409-427.
267. Pronin, E. and Jacobs, E., 2008. Thought speed, mood, and the experience of mental motion. *Perspectives on Psychological Science*, *3*(6), pp.461-485.
268. Pronin, E. and Wegner, D.M., 2006. Manic thinking: Independent effects of thought speed and thought content on mood. *Psychological science*, *17*(9), pp.807-813.
269. Pronin, E. and Wegner, D.M., 2006. Manic thinking: Independent effects of thought speed and thought content on mood. *Psychological science*, *17*(9), pp.807-813.

270. Radden, J. ed., 2002. *The nature of melancholy: From Aristotle to Kristeva*. Oxford University Press, USA.
271. Rakofsky, J. and Rapaport, M., 2018. Mood disorders. *CONTINUUM: Lifelong Learning in Neurology*, *24*(3), pp.804-827.
272. Rakofsky, J. and Rapaport, M., 2018. Mood disorders. *CONTINUUM: Lifelong Learning in Neurology*, *24*(3), pp.804-827.
273. Ratcliffe, M. (2008). Feelings of Being: Phenomenology, psychiatry and the sense of reality. Oxford: Oxford University Press.
274. Ratcliffe, M., 2002. Heidegger's attunement and the neuropsychology of emotion. *Phenomenology and the Cognitive Sciences*, *1*(3), pp.287-312.
275. Ratcliffe, M., 2012. The phenomenology of existential feeling. *Feelings of being alive*, pp.23-54.
276. Ratcliffe, M., 2010. The phenomenology and neurobiology of moods and emotions. In *Handbook of phenomenology and cognitive science* (pp. 123-140). Springer, Dordrecht.
277. Ratcliffe, M., 2020. Existential feelings. In *The Routledge Handbook of Phenomenology of Emotion* (pp. 250-261). Routledge.
278. Ratheesh, A., Davey, C., Hetrick, S., Alvarez-Jimenez, M., Voutier, C., Bechdolf, A., McGorry, P.D., Scott, J., Berk, M. and Cotton, S.M., 2017. A systematic review and meta-analysis of prospective transition from major depression to bipolar disorder. *Acta Psychiatrica Scandinavica*, *135*(4), pp.273-284.
279) Rice, R.E. and Fuller, R., 2013. Theoretical perspectives in the study of communication and the Internet. In *The Oxford handbook of internet studies*. Oxford University Press.
280. Robins, L.N., Helzer, J.E., Weissman, M.M., Orvaschel, H., Gruenberg, E., Burke, J.D. and Regier, D.A., 1984. Lifetime prevalence of specific psychiatric disorders in three sites. *Archives of general psychiatry*, *41*(10), pp.949-958.
281. Robinson, J.P., Shaver, P.R. and Wrightsman, L.S. eds., 2013. *Measures of personality and social psychological attitudes: Measures of social psychological attitudes* (Vol. 1). Academic Press.
282. Roe, J., Cresswell, A., Mittal, S., Al-Uzri, M., Tanner, J., Moore, M., Simpson, S., Guo, B. and Morriss, R., 2022. Service user experiences of care recommendations from the 2014 NICE guideline for bipolar disorder: a survey. *Journal of Mental Health*, pp.1-8.

283) Rogers, C.R., 1951. Perceptual reorganization in client-centered therapy.
284. Romanyshyn, R.D. and Whalen, B.J., 1989. Psychology and the attitude of science. In *Existential-phenomenological perspectives in psychology* (pp. 17-39). Springer, Boston, MA.
285. Rosenhan, D.L., 1975. The contextual nature of psychiatric diagnosis.
286. Rosso, O.A., Mendes, A., Berretta, R., Rostas, J.A., Hunter, M. and Moscato, P., 2009. Distinguishing childhood absence epilepsy patients from controls by the analysis of their background brain electrical activity (II): a combinatorial optimization approach for electrode selection. *Journal of neuroscience methods*, *181*(2), pp.257-267.
287. Rudestam, K.E. and Newton, R.R., 2014. *Surviving your dissertation: A comprehensive guide to content and process*. Sage publications.
288. Ruggero, C.J., Kotov, R., Watson, D., Kilmer, J.N., Perlman, G. and Liu, K., 2014. Beyond a single index of mania symptoms: Structure and validity of subdimensions. *Journal of affective disorders*, *161*, pp.8-15.
289. Rustin, T.A., 2008. Using artwork to understand the experience of mental illness: Mainstream artists and Outsider artists. *GMS Psycho-Social Medicine*, *5*.
290. Ryan, N.D., Puig-Antich, J., Cooper, T., Rabinovich, H., Ambrosini, P., Davies, M., King, J., Torres, D. and Fried, J., 1986. Imipramine in adolescent major depression: Plasma level and clinical response. *Acta Psychiatrica Scandinavica*, *73*(3), pp.275-288.
291. Sachsse, U., Vogel, C. and Leichsenring, F., 2006. Results of psychodynamically oriented trauma-focused inpatient treatment for women with complex posttraumatic stress disorder (PTSD) and borderline personality disorder (BPD). *Bulletin of the Menninger Clinic*, *70*(2), p.125.
292. Sagar, R. and Pattanayak, R.D., 2017. Potential biomarkers for bipolar disorder: where do we stand?. *The Indian Journal of Medical Research*, *145*(1), p.7.
293. Saha, S., Lim, C.C., Cannon, D.L., Burton, L., Bremner, M., Cosgrove, P., Huo, Y. and J McGrath, J., 2021. Co-morbidity between mood and anxiety disorders: A systematic review and meta-analysis. *Depression and anxiety*, *38*(3), pp.286-306.
294. Salvatore, P., Tohen, M., Khalsa, H.M.K., Baethge, C., Tondo, L. and Baldessarini, R.J., 2007. Longitudinal research on

bipolar disorders. *Epidemiology and Psychiatric Sciences*, *16*(2), pp.109-117.
295. Sanchez-Moreno, J., Martinez-Aran, A., Tabarés-Seisdedos, R., Torrent, C., Vieta, E. and Ayuso-Mateos, J.L., 2009. Functioning and disability in bipolar disorder: an extensive review. *Psychotherapy and psychosomatics*, *78*(5), pp.285-297.
296) Sarbin, T.R., Taft, R. and Bailey, D.E., 1960. Clinical inference and cognitive theory.
297) Sass, L., Parnas, J. and Zahavi, D., 2011. Phenomenological psychopathology and schizophrenia: contemporary approaches and misunderstandings. *Philosophy, Psychiatry, & Psychology*, *18*(1), pp.1-23.
298) Sass, L., Pienkos, E., Skodlar, B., Stanghellini, G., Fuchs, T., Parnas, J. and Jones, N., 2017. EAWE: examination of anomalous world experience. *Psychopathology*, *50*(1), pp.10-54.
299) Sass, L., Pienkos, E. and Fuchs, T., 2017. Other worlds: introduction to the special issue on the EAWE: Examination of Anomalous World Experience. *Psychopathology*, *50*(1), pp.5-9.
300. Sass, L. and Parnas, J. (2003). Schizophrenia, consciousness, and the self. Schizophrenia Bulletin 29: 427–444.
301. Sass, L.A. and Parnas, J. (2006). Explaining schizophrenia: the relevance of phenomenology. In Chung, M.C., Fulford, K.W.M., Graham, G. (eds.): Reconceiving Schizophrenia (pp. 63-95). Oxford: Oxford University Press.
302. Saunders, M., Lewis, P.H.I.L.I.P. and Thornhill, A.D.R.I.A.N., 2007. Research methods. *Business Students 4th edition Pearson Education Limited, England*.
303. Schachter, S. and Singer, J., 1962. Cognitive, social, and physiological determinants of emotional state. *Psychological review*, *69*(5), p.379.
304) Schafer, L.C., Glasgow, R.E., McCaul, K.D. and Dreher, M., 1983. Adherence to IDDM regimens: Relationship to psychosocial variables and metabolic control. *Diabetes care*, *6*(5), pp.493-498.
305) Schmidt-Degenhard M. Zur Problemgeschichte und Psychopathologie der Paranoia [The history and psychopathology of paranoia]. Fortschr Neurol Psychiatr. 1998 Jul;66(7):313-25. German. doi: 10.1055/s-2007-995268. PMID: 9697006.
306. Schmitz, M. and Ogg, G. eds., 2012. *The geologic time scale 2012*. elsevier.
307. Schneider, M.R., DelBello, M.P., McNamara, R.K., Strakowski, S.M. and Adler, C.M., 2012. Neuroprogression in bipolar disorder. *Bipolar disorders*, *14*(4), pp.356-374.
308) Schutz, W.C., 1973. Elements of encounter.

309. Scott, J., Colom, F. and Vieta, E., 2007. A meta-analysis of relapse rates with adjunctive psychological therapies compared to usual psychiatric treatment for bipolar disorders. *International Journal of Neuropsychopharmacology*, *10*(1), pp.123-129.
310. Scott, J., Hidalgo-Mazzei, D., Strawbridge, R., Young, A., Resche-Rigon, M., Etain, B., Andreassen, O.A., Bauer, M., Bennabi, D., Blamire, A.M. and Boumezbeur, F., 2019. Prospective cohort study of early biosignatures of response to lithium in bipolar-I-disorders: overview of the H2020-funded R-LiNK initiative. *International journal of bipolar disorders*, *7*(1), pp.1-10.
311. Scott, J., Stanton, B., Garland, A. and Ferrier, I.N., 2000. Cognitive vulnerability in patients with bipolar disorder. *Psychological medicine*, *30*(2), pp.467-472.
312) Seitz, S., 2016. Pixilated partnerships, overcoming obstacles in qualitative interviews via Skype: A research note. *Qualitative research*, *16*(2), pp.229-235.
313. Servaas, M., Riese, H., Renken, R.J., Wichers, M., Bastiaansen, J.A., Figueroa, C.A., Mocking, R.J.T.M., Marsman, J.B.C., Schene, A.H., Schoevers, R.A. and Ruhe, E., 2016. Mapping daily affective instability to functional brain subnetworks in remitted MDD-patients. *Bipolar Disorders*, *18*, pp.112-112.
314. Shaffer, J.J., Johnson, C.P., Fiedorowicz, J.G., Christensen, G.E., Wemmie, J.A. and Magnotta, V.A., 2018. Impaired sensory processing measured by functional MRI in Bipolar disorder manic and depressed mood states. *Brain imaging and behavior*, *12*(3), pp.837-847.
315. Shapero, B.G., Stange, J.P., Goldstein, K.E., Black, C.L., Molz, A.R., Hamlat, E.J., Black, S.K., Boccia, A.S., Abramson, L.Y. and Alloy, L.B., 2015. Cognitive styles in mood disorders: Discriminative ability of unipolar and bipolar cognitive profiles. *International journal of cognitive therapy*, *8*(1), p.35.
316. Shidhaye, R., Lund, C. and Chisholm, D., 2015. Closing the treatment gap for mental, neurological and substance use disorders by strengthening existing health care platforms: strategies for delivery and integration of evidence-based interventions. *International journal of mental health systems*, *9*(1), pp.1-11.
317. Shum, W.G., 2022, July. Misdiagnosis of bipolar disorder patients: Detrimental effects of antidepressant monotherapy on the brain. In *AIP Conference Proceedings* (Vol. 2511, No. 1, p. 020062). AIP Publishing LLC.

318. Sierra, P., Livianos, L. and Rojo, L., 2005. Quality of life for patients with bipolar disorder: relationship with clinical and demographic variables. *Bipolar disorders*, *7*(2), pp.159-165.
319. Silva, R.D.A.D., Mograbi, D.C., Silveira, L.A.S., Nunes, A.L.S., Novis, F.D., Cavaco, P.A., Landeira-Fernandez, J. and Cheniaux, E., 2013. Mood self-assessment in bipolar disorder: a comparison between patients in mania, depression, and euthymia. *Trends in psychiatry and psychotherapy*, *35*, pp.141-145.
320. Silverstone, P.H., McGrath, B.M. and Kim, H., 2005. Bipolar disorder and myo-inositol: a review of the magnetic resonance spectroscopy findings. *Bipolar disorders*, *7*(1), pp.1-10.
321. Simpson, H.B., Foa, E.B., Liebowitz, M.R., Ledley, D.R., Huppert, J.D., Cahill, S., Vermes, D., Schmidt, A.B., Hembree, E., Franklin, M. and Campeas, R., 2008. A randomized, controlled trial of cognitive-behavioral therapy for augmenting pharmacotherapy in obsessive-compulsive disorder. *American Journal of Psychiatry*, *165*(5), pp.621-630.
322. Singh, T. and Rajput, M., 2006. Misdiagnosis of bipolar disorder. *Psychiatry `(Edgmont)*, *3*(10), p.57.
323. Sloan, K.L., Kivlahan, D. and Saxon, A.J., 2000. Detecting bipolar disorder among treatment-seeking substance abusers. *The American journal of drug and alcohol abuse*, *26*(1), pp.13-23.
324. Smith, J. A. (1996). Beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology, Psychology & Health, 11(2), 261-271.
325. Smith, J.A. & Osborn, M. (2008). Interpretative phenomenological analysis. In J.A. Smith (Ed.) Qualitative Psychology: A practical guide to research methods (pp. 53-80). London: Sage.
326. Smith, J.A., Flowers, P., Larkin, M. (2009). Interpretative Phenomenological Analysis: Theory, Method and Research. London: Sage.
327. Sockalingam, S., Blank, D., Al Jarad, A., Alosaimi, F., Hirschfield, G. and Abbey, S.E., 2011. A comparison of depression screening instruments in hepatitis C and the impact of depression on somatic symptoms. *Psychosomatics*, *52*(5), pp.433-440.
328) Soreca, I., Frank, E. and Kupfer, D.J., 2009. The phenomenology of bipolar disorder: what drives the high rate of medical burden and determines long-term prognosis?. *Depression and Anxiety*, *26*(1), pp.73-82.

329) Sousa, D. (2017). Static and Genetic Phenomenology. In: Existential Psychotherapy. Palgrave Macmillan, New York. https://doi.org/10.1057/978-1-349-95217-5_2

330) Sperry, S.H., Walsh, M.A. and Kwapil, T.R., 2020. Emotion dynamics concurrently and prospectively predict mood psychopathology. *Journal of affective disorders*, *261*, pp.67-75.

331. Spielberg, S.P., Gordon, G.B., Blake, D.A., Goldstein, D.A. and Herlong, H.F., 1981. Predisposition to phenytoin hepatotoxicity assessed in vitro. *New England Journal of Medicine*, *305*(13), pp.722-727.

332. Spoorthy, M.S., Chakrabarti, S. and Grover, S., 2019. Comorbidity of bipolar and anxiety disorders: An overview of trends in research. *World journal of psychiatry*, *9*(1), p.7.

333. Srinivasan, V., Smits, M., Spence, W., Lowe, A.D., Kayumov, L., Pandi-Perumal, S.R., Parry, B. and Cardinali, D.P., 2006. Melatonin in m

334. Sripada, C.S. and Silk, K.R., 2007. The role of functional neuroimaging in exploring the overlap between borderline personality disorder and bipolar disorder. *Current Psychiatry Reports*, *9*(1), pp.40-45.

335. Stahl, S.M., Morrissette, D.A., Faedda, G., Fava, M., Goldberg, J.F., Keck, P.E., Lee, Y., Malhi, G., Marangoni, C., McElroy, S.L. and Ostacher, M., 2017. Guidelines for the recognition and management of mixed depression. *CNS spectrums*, *22*(2), pp.203-219.

336. Stanghellini, G. and Raballo, A., 2007. Exploring the margins of the bipolar spectrum: temperamental features of the typus melancholicus. *Journal of affective disorders*, *100*(1-3), pp.13-21.

337. Starr, L.R. and Davila, J., 2008. Excessive reassurance seeking, depression, and interpersonal rejection: a meta-analytic review. *Journal of abnormal psychology*, *117*(4), p.762.

338. Starr, L.R. and Davila, J., 2008. Excessive reassurance seeking, depression, and interpersonal rejection: a meta-analytic review. *Journal of abnormal psychology*, *117*(4), p.762.

339. Starr, L.R. and Davila, J., 2012. Temporal patterns of anxious and depressed mood in generalized anxiety disorder: A daily diary study. *Behaviour research and therapy*, *50*(2), pp.131-141.

340. Stein, D.J., Radua, J., Mataix-Cols, D. and Horn, N., 2013. Systematic review and voxel-based meta-analysis of diffusion tensor imaging studies in bipolar disorder. *Journal of affective disorders*, *150*(2), pp.192-200.

341. Stokes, P., Shamoian, C., Stoll, P. and Patton, M., 1971. Efficacy of lithium as acute treatment of manic-depressive illness. *The Lancet*, *297*(7713), pp.1319-1325.
342. Stokes, P.R., Kalk, N.J. and Young, A.H., 2017. Bipolar disorder and addictions: the elephant in the room. *The British Journal of Psychiatry*, *211*(3), pp.132-134.
343. Strauss, K.A., Markx, S., Georgi, B., Paul, S.M., Jinks, R.N., Hoshi, T., McDonald, A., First, M.B., Liu, W., Benkert, A.R. and Heaps, A.D., 2014. A population-based study of KCNH7 p. Arg394His and bipolar spectrum disorder. *Human molecular genetics*, *23*(23), pp.6395-6406.
344. Suddick, K.M., Cross, V., Vuoskoski, P., Galvin, K.T. and Stew, G., 2020. The work of hermeneutic phenomenology. *International Journal of Qualitative Methods*, *19*, p.1609406920947600.
345. Sulis, W. and Trofimova, I., 2017. An investigation of the coupling of temperament traits with anxiety. *European Psychiatry*, *41*(S1), pp.S72-S73.
346) Sullivan, G.J., Ohm, J.R., Han, W.J. and Wiegand, T., 2012. Overview of the high efficiency video coding (HEVC) standard. *IEEE Transactions on circuits and systems for video technology*, *22*(12), pp.1649-1668.
347. Sutton, P.A., Awad, S., Perkins, A.C. and Lobo, D.N., 2010. Comparison of lateral thermal spread using monopolar and bipolar diathermy, the Harmonic Scalpel™ and the Ligasure™. *Journal of British Surgery*, *97*(3), pp.428-433.
348. Sylvia, L.G., Friedman, E.S., Kocsis, J.H., Bernstein, E.E., Brody, B.D., Kinrys, G., Kemp, D.E., Shelton, R.C., McElroy, S.L., Bobo, W.V. and Kamali, M., 2013. Association of exercise with quality of life and mood symptoms in a comparative effectiveness study of bipolar disorder. *Journal of affective disorders*, *151*(2), pp.722-727.
349. Szabo, C., 2016. Gasotransmitters in cancer: from pathophysiology to experimental therapy. *Nature reviews Drug discovery*, *15*(3), pp.185-203.
350. Tabares-Seisdedos, R., Escamez, T., Martinez-Gimenez, J.A., Balanza, V., Salazar, J., Selva, G., Rubio, C., Vieta, E., Geijo-Barrientos, E., Martinez-Aran, A. and Reiner, O., 2006. Variations in genes regulating neuronal migration predict reduced prefrontal cognition in schizophrenia and bipolar subjects from mediterranean Spain: a preliminary study. *Neuroscience*, *139*(4), pp.1289-1300.

351. Tardiff, K. and Koenigsberg, H.W., 1985. Assaultive behavior among psychiatric outpatients. *The American journal of psychiatry*.
352) Tassone, B.G., 2017. The relevance of Husserl's phenomenological exploration of interiority to contemporary epistemology. *Palgrave Communications*, *3*(1), pp.1-11.
353. Tellenbach, M., Schneider, M., Mordasini, L., Thalmann, G.N. and Kessler, T.M., 2013. Transcutaneous electrical nerve stimulation: an effective treatment for refractory non-neurogenic overactive bladder syndrome?. *World journal of urology*, *31*(5), pp.1205-1210.
354. Telles-Correia, D., Saraiva, S. and Gama Marques, J., 2016. Jaspers' phenomenology. *Folia Med*, *60*, pp.95-102.
355. Telles-Correia, D., Saraiva, S. and Gama Marques, J., 2016. Jaspers' phenomenology. *Folia Med*, *60*, pp.95-102.
356) Thilly, F., 1906. Psychology, natural science, and philosophy. *The Philosophical Review*, *15*(2), pp.130-144.
357) Thomason, K., West, J., Logan, R.F.A., Coupland, C. and Holmes, G.K.T., 2003. Fracture experience of patients with coeliac disease: a population based survey. *Gut*, *52*(4), pp.518-522.
358. Thompson, E. (2007). Mind in Life: Biology, Phenomenology, and the Sciences of Mind. Cambridge, Mass.: Harvard University Press.
359. Thompson, P.M., Dalwani, M., Hayashi, K.M., Lee, A.D., Nicoletti, M., Trakhtenbroit, M., Glahn, D.C., Brambilla, P., Sassi, R.B. and Mallinger, A.G., 2007. Greater cortical gray matter density in lithium-treated patients with bipolar disorder. *Biological psychiatry*, *62*(1), pp.7-16.
360. Thönes, S. and Oberfeld, D., 2015. Time perception in depression: A meta-analysis. *Journal of affective disorders*, *175*, pp.359-372.
361. Tondo, L., H Vazquez, G. and J Baldessarini, R., 2017. Depression and mania in bipolar disorder. *Current neuropharmacology*, *15*(3), pp.353-358.
362. Tyng, C.M., Amin, H.U., Saad, M.N. and Malik, A.S., 2017. The influences of emotion on learning and memory. *Frontiers in psychology*, *8*, p.1454.
363. Tysk, L., 1984. Time perception and affective disorders. *Perceptual and Motor Skills*, *58*(2), pp.455-464.
364. Van Duppen, Z., 2017. The meaning and relevance of Minkowski's' loss of vital contact with reality'. *Philosophy, Psychiatry, & Psychology*, *24*(4), pp.385-397.
365. Van Loo, H.M., De Jonge, P., Romeijn, J.W., Kessler, R.C. and Schoevers, R.A., 2012. Data-driven subtypes of major

depressive disorder: a systematic review. *BMC medicine*, *10*(1), pp.1-12.

366. Van Meter, A.R., Burke, C., Kowatch, R.A., Findling, R.L. and Youngstrom, E.A., 2016. Ten-year updated meta-analysis of the clinical characteristics of pediatric mania and hypomania. *Bipolar disorders*, *18*(1), pp.19-32.

367. Varela, F. J. (1996). Neurophenomenology: a methodological remedy for the hard problem. Journal of Consciousness Studies 3(4): 330–49.

368. Varela, F. J., Thompson, E., and Rosch, E. (1991). The Embodied Mind: Cognitive Science and Human Experience. Cambridge, Mass.: MIT Press

369. Varela, F.J. (1996). Neurophenomenology: a methodological remedy for the hard problem. Journal of Consciousness Studies 3(4): 330–49.

370. Varela, F.J. (1997). The naturalization of phenomenology as the transcendence of nature: searching for generative mutual constraints. Alter 5: 355–81.

371. Varela, F.J., Thompson, E., and Rosch, E. 1991. The Embodied Mind: Cognitive Science and Human Experience. Cambridge, Mass.: MIT Press.

372. Vieta, E., Salagre, E., Grande, I., Carvalho, A.F., Fernandes, B.S., Berk, M., Birmaher, B., Tohen, M. and Suppes, T., 2018. Early intervention in bipolar disorder. *American Journal of Psychiatry*, *175*(5), pp.411-426.

373. Vogel, M., Pfeifer, S., Schaub, R.T., Grabe, H.J., Barnow, S., Freyberger, H.J. and Cascorbi, I., 2004. Decreased levels of dopamine D3 receptor mRNA in schizophrenic and bipolar patients. *Neuropsychobiology*, *50*(4), pp.305-310.

374. Vogeley, K. and Kupke, C., 2007. Disturbances of time consciousness from a phenomenological and a neuroscientific perspective. *Schizophrenia bulletin*, *33*(1), pp.157-165.

375) Vrobel, S., 2008. Fractal time: Extended observer perspectives. In *Simultaneity: Temporal Structures and Observer Perspectives* (pp. 3-14).

376. Wahl, S.M., 2007. Transforming growth factor-β: innately bipolar. *Current opinion in immunology*, *19*(1), pp.55-62.

377. Wang, Z., Chen, J., Zhang, C., Gao, K., Hong, W., Xing, M., Wu, Z., Yuan, C., Huang, J., Peng, D. and Wang, Y., 2015. Guidelines concordance of maintenance treatment in euthymic patients with bipolar disorder: data from the national bipolar mania pathway survey (BIPAS) in mainland China. *Journal of Affective Disorders*, *182*, pp.101-105.

378. Watson, R. (2017). Phenomenology as qualitative research: A critical analysis of meaning attribution John Paley (2016), Routledge, ISBN-13: 978-1138652811. Nursing Philosophy, 18(4), e12180. doi:10.1111/nup.12180
379. Wehrle, M., 2020. Being a body and having a body. The twofold temporality of embodied intentionality. *Phenomenology and the Cognitive Sciences*, *19*(3), pp.499-521.
380. Wehr, T.A., Turner, E.H., Shimada, J.M., Lowe, C.H., Barker, C. and Leibenluft, E., 1998. Treatment of a rapidly cycling bipolar patient by using extended bed rest and darkness to stabilize the timing and duration of sleep. *Biological psychiatry*, *43*(11), pp.822-828.
381. Weissman, M.M., Bland, R.C., Canino, G.J., Faravelli, C., Greenwald, S., Hwu, H.G., Joyce, P.R., Karam, E.G., Lee, C.K., Lellouch, J. and Lepine, J.P., 1996. Cross-national epidemiology of major depression and bipolar disorder. *Jama*, *276*(4), pp.293-299.
382. Wittmann, M., Van Wassenhove, V., Craig, B. and Paulus, M.P., 2010. The neural substrates of subjective time dilation. *Frontiers in human neuroscience*, p.2.
383. Wynn, T., Overmann, K.A. and Malafouris, L., 2021. 4E cognition in the lower Palaeolithic. *Adaptive Behavior*, *29*(2), pp.99-106.
384. Wyrick, R.A. and Wyrick, L.C., 1977. Time experience during depression. *Archives of General Psychiatry*, *34*(12), pp.1441-1443.
385. Yen, S., Shea, M.T., Battle, C.L., Johnson, D.M., Zlotnick, C., Dolan-Sewell, R., Skodol, A.E., Grilo, C.M., Gunderson, J.G., Sanislow, C.A. and Zanarini, M.C., 2002. Traumatic exposure and posttraumatic stress disorder in borderline, schizotypal, avoidant, and obsessive-compulsive personality disorders: fingings from the collaborative longitudinal personality disorders study. *The Journal of nervous and mental disease*, *190*(8), pp.510-518.
386. Youngstrom, E., Youngstrom, J.K. and Starr, M., 2005. Bipolar diagnoses in community mental health: Achenbach Child Behavior Checklist profiles and patterns of comorbidity. *Biological Psychiatry*, *58*(7), pp.569-575.
387. Zahavi, D., 2008. Preface: The Mind Without, the World Within. *Synthese*, pp.309-311.
388. Zahavi, D. (1999). Self-awareness and alterity: A phenomenological Investigation. Evanston: Northwestern University Press.
389. Zahavi, D. (2003). Husserl's Phenomenology. Stanford: Stanford University Press.

390. Zahavi, D. (2005). Subjectivity and Selfhood: Investigating the first-person perspective. Cambridge, MA.: MIT Press.
391. Zahavi, D. (2019). Applied phenomenology: Why it is safe to ignore the epoché. Continental Philosophy Review, in press.
392. Zahavi, D. (2019). Getting it quite wrong: van Manen and Smith on phenomenology. Qualitative Health Research 29(6): 900-907.
393. Zahavi, D. (2019). Phenomenology: The Basics. London: Routledge.
394. Zahavi, D. (ed.) (2012). The Oxford Handbook of Contemporary Phenomenology. Oxford: Oxford University Press. doi.org/10.1093/oxfordhb/9780199594900.001.0001
395. Zahavi, D. 2003. Husserl's Phenomenology. Stanford: Stanford University Press.
396. Zahavi, D. 2004. Phenomenology and the project of naturalization. Phenomenology and the Cognitive Sciences 3(4): 331–47.
397. Zahavi, D. 2005. Subjectivity and Selfhood: Investigating the first-person perspective. Cambridge, Mass.: MIT Press.
398. Zahavi, D. 2014. Self and Other: Exploring Subjectivity, Empathy, and Shame. Oxford: Oxford University Press.
399. Zahavi, D. 2015. Husserl and the Transcendental. In S. Gardner & M. Grist (eds.): The Transcendental Turn, pp. 228-243. Oxford: Oxford University Press.
400. Zahavi, D. 2017. Husserl's Legacy: Phenomenology, Metaphysics, and Transcendental Philosophy. Oxford: Oxford University Press.
401. Zahavi, D. and Gallagher, S., 2008. The (in) visibility of others: a reply to Herschbach. *Philosophical Explorations*, *11*(3), pp.237-244.
402. Zahavi, D. and Martiny, K.M., 2019. Phenomenology in nursing studies: New perspectives. *International journal of nursing studies*, *93*, pp.155-162.
403. Zahavi, D. and Parnas, J. (2003). Conceptual problems in infantile autism research: Why cognitive science needs phenomenology. Journal of Consciousness Studies 10/9, 53–71.
404. Zahavi, D., 2010. Inner (time-) consciousness. In *On time-new contributions to the husserlian phenomenology of time* (pp. 319-339). Springer, Dordrecht.
405. Zahavi, D., 2019. Getting it quite wrong: Van Manen and Smith on phenomenology. *Qualitative health research*, *29*(6), pp.900-907.

406. Zahavi, D., 2020. The practice of phenomenology: The case of Max van Manen. *Nursing Philosophy*, *21*(2), p.e12276.
407. Zahavi, D., Martiny, K.M.M. (2019). Phenomenology in nursing studies: New perspectives. International Journal of Nursing Studies 93: 155-162.
408. Zahavi, D., 2007. Subjectivity and the First-Person Perspective. *The Southern Journal of Philosophy*, *45*(S1), pp.66-84.
409. Zanarini, 2004. Borderline personality disorder. *The Lancet*, *364*(9432), pp.453-461.
410. Zelazo, P.D., Moscovitch, M. and Thompson, E. eds., 2007. *The Cambridge handbook of consciousness*. Cambridge University Press.
411. Ziebold, C., 2022. Challenges and Insights From Treating Psychotic Disorders During COVID-19 Pandemic in Brazil. *Schizophrenia Bulletin Open*, *3*(1), p.sgac061.
412. Zimmerman, M. and Morgan, T.A., 2022. The relationship between borderline personality disorder and bipolar disorder. *Dialogues in clinical neuroscience*.
413. Zimmerman, M., Kerr, S., Balling, C., Kiefer, R. and Dalrymple, K., 2020. DSM-5 anxious distress specifier in patients with bipolar depression. *Annals of Clinical Psychiatry: Official Journal of the American Academy of Clinical Psychiatrists*, *32*(3), pp.157-163.
414) Zimmerman M, Ruggero CJ, Chelminski I, Young D. Is bipolar disorder overdiagnosed? J Clin Psychiatry. 2008 Jun;69(6):935-40. doi: 10.4088/jcp.v69n0608. PMID: 18466044.

Appendices

Appendix 1: Informed consent form

INFORMED CONSENT

This form is a voluntary expression of the consent by a competent subject and the adequate information disclosure about the research are critical and essential elements of the informed consent process in relation to a properly controlled research study

Please see the following website for further details:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5980471/

THE RESEARCHER

My name is Jack Thompson, Bsc Psychology, MBA. I will be undertaking the research study and I will be your main point of contact throughout the study. You may also wish to contact the University I am facilitating this research through if you have questions, queries or concerns. Please find their contact details below.

MY CONTACT DETAILS:

jackt2711@mail.com and 07415 880157

INVITATION

You are being invited to take part in this project, as part of a doctoral research program to become a Doctor of Philosophy in clinical psychology. The program is facilitated by Selinius University.

Please note the university's credentials:

https://www.uniselinus.education/degree-program/doctor-ph-d-degree-online-via-distance-learning

PROJECT TITLE

Living with bipolar or something like it

An anomalous disturbance relates here to an experience, which one might regard as abnormal. An anomalous experience of time can vary in experience, description, structure, and content and by degree. You may simply have had an experience where time appears to go faster, and or slower than normal, or may be even stand still. Typically these kinds of disturbances are unrelated to one's normal activity level, that is to say, one's experiences of time should not only occur during periods of negative or positive anticipation or excitement. Rather they should be experienced subjectively and felt to deviate from your ordinary day to day experiences

CONTEXT

The research project relates broadly speaking to any past or present life event experience that holds meaning and concern for you. What it is like subjectively and personally to live with bipolar or something like it, will be examined, whether you have been clinically diagnosed with a disorder or not,

RESEARCH ETHICS

According to the British Psychological Society

Code of Human Research Ethics is founded on a set of general principles that are applicable to all research contexts and are intended to cover all research with human participants.

https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/BPS%20Code%20of%20Human%20Research%20Ethics.pdf

PRINCIPLES AND CODES OF PRACTICE

The ethical codes of practice are built around the following 4 principles, and should be demonstrated in practice in all ethically grounded research:

(i) Respect; (ii) Competence; (iii) Responsibility; (iv) Integrity.

https://www.bps.org.uk/sites/bps.org.uk/files/Policy%20-%20Files/BPS%20Code%20of%20Ethics%20and%20Conduct%20%28Updated%20July%202018%29.pdf

Please familiarise yourself generally as far as you like with these documents prior to agreeing to participate in the research. If you have any questions prior to that time, please feel free to contact me at any time

THE RESEARCH PROCESS

What will be done?

1. You are invited to participate in a series of semi structured interviews
2. The interview will be conducted via the internet, by myself, using zoom technology
3. Each interview will typically last 45-60 mins.
4. The aims is to conduct at least 2 interviews over a period of 3 months, beginning April 2022
5. During the interview you will be asked questions about your experiences of time and any anomalies that you have experienced, in relation to any past or present related event (s)
6. You have the right to end the interview at any time if you feel any sense or discomfort
7. The interview will be securely recorded and stored
8. The interviews will subsequently be transcribed securely and subsequently analysed by myself and the findings discussed with you. No other person will have access to the data at any time,
9. Your data will be held securely and anonymously at all times and you will be given access to the data, including the results, on request.
10. See the following link for further details:

https://www.eui.eu/documents/servicesadmin/deanofstudies/researchethics/guide-data-protection-research.pdf

RESEARCH AIMS

T0 gain a better understanding of the relationship between abnormal time experiences and bipolar disorder or some other mood disorder that may be evident, by identifying with the psychological structures that underpin that relationship, with a view to distinguishing any possible temporal differences between features of similarly related disorders

Objectives

- To engage in a phenomenological and psychological analysis for evidence of anomalous experiences of time

- To describe your lived and affective experiences of time subjectively and identify where possible, common shared temporal features of their experiences that may either overlap or converge different conditions
- To compare your experiences of time subjectively, to determine which, if any, might be distinctive of a given mood disorder?
- To identify, describe and analyse the psychological structures that support each specific disorder, together with any common factors that might connect them

MOTIVATION

This project is motivated by the high number of reported cases of mis-diagnoses in bipolar. The main concern here is the problem of over diagnosis, ie where a bipolar condition is diagnosed as often when present as when it is not present.

Why might this happen you may ask?

The reasons are varied, however bipolar disorder type II is especially difficult to diagnose accurately because of the difficulty in differentiation of this disorder from recurrent unipolar depression (recurrent depressive episodes) in depressed patients.

CONTRIBUTION TO KNOWLEDGE

It has been widely reported, if not widely recognised in the literature, that a better understanding of the subjective and lived experience of time from a first person perspective can help bridge the empirical / phenomenological gap in support of advancements in psychopathology generally and bipolar disorder in particular.By providing more qualitative evidence of the presence (or not) of a given disorder, then this might help to make future diagnosis more reliable

PARTICIPANTS' RIGHTS

If you agree to participate in this research study you may decide to stop freely at any time without explanation. You have the right to ask that any data you have supplied to that point be withdrawn/destroyed. You will still be paid for your contribution (or as appropriate, e.g., "and without penalty"). You have the right to omit or refuse to answer or respond to any question that is asked of you (as appropriate, "and without penalty"). You have the right to have your questions about the procedures answered

(unless answering these questions would interfere with the study's outcome). If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

BENEFITS AND RISKS

There are no known benefits or risks for you in this study. However the study may involve questions which may unveil psychological or physical concerns, of which you might be presently unaware and which may upset you present or future well-being. You may subsequently want to discuss any matter which may arise by this means, with an appropriate health professional.

COST, REIMBURSEMENT AND COMPENSATION

Your participation in this study is voluntary. You will receive in return for your participation 50.00. You will also be entitled to access a range of different information sources, relating to bipolar disorders generally

CONFIDENTIALITY/ANONYMITY

The data I collect will not contain any personal information about you except that which is related to this study. No one will link the data you provided to the identifying information you supplied (e.g., name, address, email)

When your role with this project is complete, your data will be anonymised. From that time, there will be no record that links the data collected from you with any personal data from which you could be identified (e.g., your name, address, email, etc.). Up until the point at which your data have been anonymised, you can decide not to consent to having your data included in further analyses. Once anonymised, these data may be made available to researchers via accessible data repositories and possibly used for novel purposes. (Increasingly, journals and funding agencies are requesting or even compelling researchers to upload data to a public repository. Include a section like this one unless you justify withholding anonymised data to the agencies you work with. In case data sharing is not applicable, say something about your intentions regarding use of the data, e.g., presentation at conferences, publication, etc. Make clear the extent to which individual participants will or will not be identifiable, as appropriate)

FURTHER INFORMATION

I will be glad to answer your questions about this study at any time. You may contact me using the contact details above at any time. If you want to find out about the final findings of this study, please let me know. If you have questions about your rights in this research, or you have any other questions, concerns, suggestions, or complaints that you do not feel can be addressed by the researcher, please contact the Convener of the PPLS Psychology Research Ethics committee (psych.ethics@ed.ac.uk).

SIGNATURES

By signing below, you are agreeing that: (1) you have read and understood this Participant Information Sheet, (2) any questions about your participation in this study you have asked have been answered satisfactorily, (3) anonymised data only may be shared in public data repositories, and (4) you are willing to take part in this voluntary research study, voluntarily.

_____ _____

Name (Printed)

_____

Signature*

_____

Dated

_____ _____

Name of person obtaining consent (Printed)

Signature of person obtaining consent

*Participants wishing to preserve some degree of anonymity may use their initials or simply send an electronic acknowledgment of your approval (I relate here to the British Psychological Society Guidelines for Minimal Standards of Ethical Approval in Psychological Research)

Appendix 2 – EAWE question framework – ‘time and events’

Time or movements appear to change speed 2.1.1 Time or movements seem speeded up* 2.1.2 Time or movements seem slowed down* 2.1.3 Time or movements seem (somehow) both speeded up and slowed down
2.2 Discrepancy between internal and external time* 2.2.1 Internal time seems slower than world time* 2.2.2 Internal time seems faster than world time*
2.3 Disruption of dynamic organization of time 2.3.1 Time feels as though completely stopped, static, infinite, disappeared 2.3.2 Time as disjointed or fragmented 2.3.3 Disorientation in time 2.3.4 Feeling limited to or isolated within the present moment 2.3.5 Various bizarre experiences of time
2.4 Disturbed anticipation 2.4.1 Perpetual anticipation 2.4.2 Constant surprise due to the inability to anticipate future events 2.4.3 Feeling that “anything could happen” 2.4.4 Protention (future directedness) collapses
2.5 Disturbed awareness of the expected future* 2.5.1 Future seems nonexistent* 2.5.2 Future seems unimportant or irrelevant* 2.5.3 Future seems threatening* 2.5.4 Premonitions*
2.6 Disturbed experience of memories or of the past 2.6.1 Past seems cut off* 2.6.2 Past seems vague or obscure* 2.6.3 Past disappears or seems nonexistent* 2.6.4 Past seems accelerated* 2.6.5 Past seems slower* 2.6.6 Intrusiveness of the past* 2.6.7 Erosion of distinction between past and present* 2.6.8 Past seems disjointed

 EAWE: Examination of Anomalous World Experience Psychopathology 2017;50:10–54 DOI: 10.1159/000454928

Appendix 3 – EAWE question framework – ‘Atmosphere’

5.1 Derealization of the world 5.1.1 Remoteness or barrier (plate-glass feeling)* 5.1.2 Decreased intensity or substantiality* 5.1.3 Deanimation* 5.1.4 Falseness 5.1.5 Loss of enticement quality* 5.1.6 Static quality, stillness, or morbid intellectualism 5.1.7 Nonspecific/other derealization*
5.2 Loss of affordances
5.3 Inanimate things seem alive or intentional*
5.4 Heightened intensity/hyperrealization*
5.5 Déjà vu experiences
5.6 Jamais vu experiences
5.7 Perplexity 5.7.1 Confusion of realms 5.7.2 Unreal interferes 5.7.3 World experienced as incoherent, disoriented 5.7.4 Perplexing hyperawareness of tacit dimension
5.8 Anomalous manner of ascribing or perceiving meaning 5.8.1 Meaning imposed on object by subject 5.8.2 Meaning inherent in the object itself 5.8.3 Proliferation of meanings from the object
5.9 Anomalous forms of meaning 5.9.1 Physical or literalist instantiation of abstract meaning 5.9.2 Anomalous classification
5.10 Intensified awareness of patterns or trends*
5.11 Anomalous sense of causal relationships 5.11.1 Actions or events seem controlled by an external force or will 5.11.2 Actions or events seem predetermined or planned
5.12 All-inclusive self-consciousness/ontological “paranoia”
5.13 Diminished ontological independence of experienced world/subjectivism 5.13.1 Subjectivism/solipsism 5.13.2 Double bookkeeping 5.13.3 Influencing physical reality 5.13.4
5.14 Revelatory or pseudorevelatory (apophanous) mood 5.14.1 Uncanny particularity 5.14.2 Self-referentiality 5.14.2.a Paranoid significance* 5.14.2.b Grandiose significance 5.14.2.c Metaphysical significance 5.14.2.d Unknown/unstatable significance 5.14.3 Unspecifiable strangeness
5.15 Quasi-mystical experiences 5.15.1 Mystic union with the world* 5.15.2 Mere being
5.16 Experiences of the end of the world
5.17 Anomalies of mood or affect 5.17.1 Emptiness, numbness, indifference, lack of spontaneous response to the world* 5.17.2 Feeling of emotional/affective blockage* 5.17.3 Pervasive, nameless anxiety with

fear of annihilation* 5.17.4 Basic irritation, restlessness, anger (nonemotional dysphoria)* 5.17.5 Detached euphoria 5.17.6 Despair, demoralization, hopelessness* 5.17.7 Abnormalities of mood constancy* 5.17.7.a Mood or emotion is abnormally persistent* 5.17.7.b Mood or emotion is abnormally labile* 5.17.8 Incongruity of mood or emotion 5.17.8.a Mood or emotion inappropriate to the current situation 5.17.8.b Moods or emotions are mutually contradictory

 EAWE: Examination of Anomalous World Experience Psychopathology 2017;50:10–54 DOI: 10.1159/000454928 49

Appendix 4: establishing meaningful units to highlight the psychological transition and expression towards the subjective structure. The analysis of the data outlined here incorporates the first three stages of the descriptive phenomenological, psychological method. The responses were given in relation to their experiences of anomalous time in relation to mood disorder

T1

What I can remember was it was prolonged… my first memory is from three and then the last one is about six. So, for those three years, and then there was other occasions in my… sort of when I was 19, there was an incident where I was sexually assaulted lasciviously, and then another one I was about 25, I was date raped

R1

When asked about a sexual assault that took place her description, looking back as an adult was both a temporal in terms of length one as well as suggesting more specifically, a high level of psychological intensity towards the experience. A little later in the interview she used the words again, ‘painful’ and ‘prolonged’ to describe how time appeared to affect her during her breakdown. A psychological reminder perhaps of past experiences reappearing.

T1

It was the way he was acting out and his behaviours, and the things that I saw on paper was like me. So, his behaviour, so they didn’t have the evidence but it was what he was doing so when I looked on the 12 signs of sexual abuse, and I was looking through—it was like it was me on paper, the things he was saying, the things he was doing and it just came over me and it hit me

R1

When asked what jogged her memory she confirms that her memory resonated by what she read about another sex offender, which reminded her of her own experience, long ago. One she had up until that point not been conscious of. The impact was sudden but clear once again

T1

I think that probably was when I was having a breakdown when I was in a domestic violence relationship……the time thing, it was like I was having out of body experience so I wasn't quite here. My hearing was hypersensitive, I just didn't feel that I was in my own body. I'd say it's the latter, so it's the slowing down. It was like I was in a quagmire of just mush…..I had to wear a hearing defender was that bad. So, at the time, I was dealing with what I was going through with him and then I just acknowledged what had happened to me in the past.

R1

When asked about anomalies of time she confirms a heightened sense of hearing as she became more aware of time slowing down in the present. The event she has recalled being highly traumatic has heightened her sense and made her aware after a very long time

T1

So, at the time, I was dealing with what I was going through with him and then I just acknowledged what had happened to me in the past. So, as I've tried to explain to my friend, my mind was on a loop of memories from the past. It was just all the past memories from when I was little and it was all to do around that time frame between three and six. Yeah, that's where it took me back and that's where the abuse happened

R1

Here her memory returns to the past and uses the word 'abuse' for the first time to describe her experience, as she becomes more aware of what had occurred and things become clearer once again

T1

Yes, but they were little tiny… And that's how I know they're real because I've always had those memories, but I've never sat and linked—and that's where I'm saying like a jigsaw puzzle, it was like that. I mean, I've got eight memories

R1

Now she describes her memories as 'tiny' as she was so young, but now they have become so vivid she can recall little details. She is even able to put a numerical number to them, suggesting it happen more rather one

T1

Tina, you need to slow down. You work in an autistic school and you are very, very heightened. Like time is slipping away, I haven't got the time to do it. So, it's like time's just… I haven't got enough time. Yeah, but it was more like I was drowning not treading. I was drowning. I've always felt helpless. Like time's going and I'm very frantic about that. Well, I must be in the future because I'm thinking I'm trying to create something……..because they tell me calm down and I'll go, "Hold up," because it's like I go very broad on my thoughts…….I'd have to go massive and do things that people have never done before and make it the best ever sports day. I feel like I've got less time.

R1

When asked about her experiences of time further, in terms of having more or less time, she describes her heightened sense as drowning on the one hand and having to excel herself to survive on the other. The psychological extent to which she has to push herself is done so using a slitting achievement analogy

T1

Because my brain, it opens like a laptop, it loads the tabs. So, it's opens like loads of tabs. So, I do it now, I wake up at three o'clock in the morning and I've got all these tabs opened up. Because my job, I have to multitask and I've got four different hats I call it to my boss, so I've got

four different responsibilities, four different hats, and then in those hats I've got all these jobs to do.

R1

She refers to her mind as a computer, which has to process vast amounts of data, and which becomes over-loaded and overwhelmed when too much information arises, which she cannot process and thus deal with, which is a continuation form the drowning metaphor, which is accentuated as she works with kids with autism and adhd

END

A1

My husband was an illegal immigrant and not playing by the rules, so I had the stress of that as well as—then afterwards, COVID hit and we were isolated. He wasn't there, again, adhering to the rules during the lockdown. So, I'm sure you'll remember the fear

R1

The fear factor here is both psychological, ie making her anxious and emotionally concerned for her young child, and mood related, in terms of the fight for her identity and life with a new child, in the backdrop of Covid. She feels out of tune with the world both domestically and environmentally

A1

I was saying it's the time factor that got me intrigued because I don't have it. I I don't manage my time well, I feel like I have none. I don't work. I've got PTSD, but also ADHD. And I know ADHD affects time like you wouldn't believe it.

R1

Here A1 acknowledges that she has a problem with organising and managing her time. She likens it with a condition that has an after the event affect and one that has both attentional and hyperactivity links

A1

I was sectioned in Australia…..And that was after a sexual assault from somebody that was trusted. I've been told that what happened in regards to that was a similar thing to the PTSD, where all the boxes inside your head open up at once and that it all becomes a little bit too much. So, basically, my memory at that stage was I don't remember my childhood, but during that period I remembered graphic details of everything and recorded that. But the reason that I did was because—not because I didn't think I was going to remember forever, but because the information was coming so quick that I knew that there wasn't enough time in the day to re-remember this information.

R1

Here A1 illustrates the grave nature of her very private experience. She refers to the present moments being overwhelming and overwhelmed due to the lack of attentional or retentional focus regarding the past. However once focused she is able to identify graphic details and record them in the present to use them for future purposes. The lack of time may have been due to the rise of past experiences emerging from her memory and flooding her present

A1

They also diagnosed at the same time with borderline personality disorder. And so, I researched both of them. The borderline personality disorder is quite a nasty one, to be honest. It's not a nice diagnosis to have, but bipolar either. Neither of them really fit me, although family members would maybe suggest that bipolar does in the way I manage life. I think I find at night, time goes slower, which is bizarre but time goes slower of an evening, you know.

R1

Here the problem of diagnosis is considered broadly on the basis of how slow time goes. There appears to be no repression of the past, defence consists in a temporal splitting of her self that excludes past and future as dimensions of object constancy, bonding, commitment, responsibility and

guiIt; where she is living constantly in the now, switching from one present experience to another, which would be consultant with BPD

A1

God stopped the clock for me and I'm like, "Wow!" You know, it's only been five minutes and I've achieved so much. so he stopped the clock, so like it slowed down I guess. You know, that five minutes feels like it was an hour and I've managed to achieve an hour's worth of work in that five minutes. And I'm like, "Wow!" you know, and I look at the clock again and be like, "No way is it only 10 minutes now." You know, like it feels really quite bizarre.

R1

Here quite uniquely A1 describes time seeming to 'slow down', as she refers to it consciously after the event. An experience which is often associated with depression and negatively and as an extension of time perceived subjectively and differently to clock time, where only five minutes had gone by when she thought an hour had passed. In contrast to this, A1 sees to describe the opposite effect, as she thought an hour had gone by, when in fact only five minutes had, and she experienced this positively. She might have otherwise described this experience of time as 'speeding up'

A1

Well, today, as an example, my son's at nursery at one o'clock and so just waiting for one o'clock to come and that was taking forever. So, I looked at the clock at 10 o'clock, 11 o'clock and it's like, oh, it's only two hours and I've still got two hours before he's to go, you know.

R1

In this response to a question about if time dragged for her, in contrast to the previous experience, A1 describes her sense of time as dragging, as she watches the clock. Then she reverts to describing time as going by so quickly.

A1

Every room needed organising, and obviously, I had a baby, and so, yeah, I guess, time felt like forever at that stage. And, you know, with a young baby, it…Yeah, yeah, I'm not sure whether it's normal or not. It felt normal for it to feel like forever, and then when you look back to that, as I look back, I'm like, "Wow," you know, that it literally was just that quick. But at the time, it felt like an eternity. I was sleep-deprived massively and quite reactive. The worst time is from 4:00 till 6:00, it still is a time that when I'm in bed it drags us and I'll try and get back to sleep, but when I get up… like I said, I've changed my routine now, so I get up, I do some exercise and that kind of thing. It tends to go a lot quicker….. the night seems to last forever. I set an alarm to pick up my son for the fact that that happens. So, basically, it all of a sudden, it's daft o'clock. Yeah, but just because time flies and then, and I set it for half an hour before because that half an hour before can just, you know, it might just be getting my keys together and getting a few things together, but it just seems to disappear and therefore, yeah, I don't like to leave it till the last minute.

R1

A1's perception of time is described here in the context of organising her routine when her partner is at work. He works away. She describes time as both appearing to last an eternity and drag forever, virtually at the same time or perhaps just after, certainly within the same organisational flow of time context, in terms of her every day routine is concerned. She describes her perception of time as switching rapidly from dragging one minute to flying and disappearing the next, as she aims to prepare for her daily routines, which seem affected by the temporal disruption she experiences

A1

She goes on to say , that she almost gets lost walking around in circles without actually walking around…I'm not just walking around in circles, but it's almost like… I don't know, I've seen it where they say you do it the one way, you opened the fridge to check out the fridge then worked out you needed to clean the fridge, then you were going go shopping and look for the receipt, and then you sorted out the receipt drawer. I'm kind of that person, you know, where… it's a lack of focus. Yeah, that's my

problem is the flow. Exactly that. And my mum used to say to me, if there's an easy way and a hard way, you'll do the hard way. I need somebody to come and plan my day for me, if you will. Like if you do this between this time and this time, and try and do this and this and this and this, then maybe I'll get somewhere.

R1

Again A1 describes how the disruption to the organisation of her daily routines affects her in the present and on a day to day basis. There is none or little reference to any future or the past activities. She describes herself as being very much stuck in the present. There seems no order or efficient structure to her activities. She gets easily distracted as she flits from one task to another, all of which entails a disruption to her daily routine. Her inability to focus on time or a particular routine means she appears to get nowhere fast.

A1

I tend to only plan one or two things. And so, for example, yesterday, I took my son to this Splash place, but we're booked in for 11:15. I had the intention of going for breakfast beforehand, which is just opposite it at 10 o'clock. We ended up getting out of the house at 11:15 and so I get agitated and anxious and a little stressed and run around in circles. I'd literally been up and down, you know, and so then ended up going without breakfast. And so, for me, that, for example, nurseries at one o'clock so at one o'clock is the time—whereas most people would be like, "Nursery drop-off is just a nursery drop-off, it's five minutes of your day, what the hell?" That to me is a massive thing. It's almost like a day's worth of mental preparation for me….I always feel out of control in regards to organising time. Yeah, I seem far too optimistic about what an hour is achieved, what's achievable in an hour maybe

R1

A1 describes how the simple task of dropping off her child at nursery turn into a logistical challenge, a task which her sense of timing and organising constrains. She describes not being able to easily order and connect different aspects of the task such as getting her things together, getting her child ready, having breakfast, even though it is not until the afternoon. Her

organisation of time doesn't flow easily from one thing to another. She is unable to prepare how ever long she has to do so. She finishes of saying that an hour for her appears to speed by without her being able to complete all her preparations and she again remains surprised how quickly it's gone by and she's failed both to notice it and do what is required within the time scale….this cause her further agitation.

END

C1

I've just been speaking to somebody. And it's not gone very well. So, for me it triggers like a trauma to something that happened like years ago, and then in my head it's like it brings back all these floods of emotions, and the way that it makes me feel is like how I've been feeling recently, I'm never going to find it again.
So like it triggers like trauma from something that happened years ago, and then it all starts, like my head just goes into like overload and it's like I can't…it's like I can't seem to find happiness in the present moment, it's like I'm constantly worrying about what's going to happen next if that makes sense.

R1

Here C1 experiences the whole past, presser and future temporal spectrum, as she describes 'floods of emotions', 'I'm never gonna find it again' and 'I can't see, to find happiness in the present moment'. This description shows the true structure of time, in so much as an experience is never truly contained within any particular moment, or confined to any one part of the temporal structure.

C1

Quite vividly, quite…very, very clear. Almost as like it happened yesterday sometimes, yeah. And it's like I can remember such small details of things that happened, that like hurt me so much but they're still in my head and I can picture it in my head

R1

Here C1 describes the clarity of her mind whilst the painful experience remains with her, appearing so vividly, even as time goes by….she describes her recall as being like it's instant

C1

I can't really see any other issues that I really struggle with apart from emotional and my feelings and relationships. I feel like that's the main thing that I struggle with, that hurts me at the moment or something that triggers my emotions to be all over the place. I think that is my biggest trigger point now.

R1

Here C1 again describes clearly how she's feels about something painful and past in the present and explains the context of her feelings and emotions as being relationship and inter subjective in nature.

C1

It seems like it goes so fast at night, sometimes I don't go to bed until 5 o clock in the morning, I feel like time just goes like that, like I'll look at the clock and it'll be 4:00 in the morning, I'm like, oh my God. Yeah, because then I worry about how much sleep I'm going to get. I worry about if I'm even going to get to sleep like at a good time, and then I worry about what time I'm going to wake up. When I wake up in the morning, the first feeling I feel is anxiety because I get scared that I've either slept past my alarm because I usually do this thing where I'd sleep through my alarms, and I'd wake up, and I'd just be in this state of panic like knowing that I'd either missed an appointment, like last week with you……it happens to me all the time…my brain literally, it just shuts down like if I'm thinking about too many things at once, I physically cannot cope

R1

The disruption that C1's life and sleep patterns has on her are described here. She describes time as going fast at night, prior to her going bed at 4 or 5 am. This then causes her to be anxious about how she will organise her time, how it will unfold and disrupt her daily routine. She also

describes it as a recurring pattern or vicious temporal circle, which then causes her to become overwhelmed and shut down

C1

A bad day is like I don't want to get up, I don't want to do anything, I don't want to eat, like I can't eat. I physically have to force myself to eat but then because I feel like I'm forcing myself to eat, I don't feel like my body's digesting it properly so I still feel weak, like this whole week I just felt so drained because I've hardly been eating. And it's not because I want it, and my appetite has just gone, it's just because I've been so upset. This only ever happens when something goes wrong with a boy. Yeah, that's the only thing and that's the only way I can tell, or something bad happens like for example if someone were to die or something bad just happens was to hurt me that emotionally, like I struggle to eat

R1

Here A1 describes a bad day apathetically and possibly after a late night and a disruption of her sleep. She describes feeling emotionally drained and upset. Her mood becomes depressed and everything seems hopeless and she becomes lacking in energy and demotivated

C1

Yeah, like obviously some days, time will just feel like it goes so slow and it's just like I'm just waiting for the day to just end, and then in. some days, the time would just go so quick and it's like oh my God, where has the day actually gone?

R1

C1 goes on to describe the effect of the upset. Time just appears to go far more slowly than when she is on a night out. However, before she know it, she has recovered and she is back out and time has once again appeared to speed up

C1

I feel like it depends how what time I wake up in a day really. If I wake up at 9:00 in the morning, I feel like sometimes my days go a bit more like monitored, whereas if I wake up at 3:00 in the afternoon I already feel like half my day's gone anyway so it feels like time's gone so fast,

R1

Here C1 describes the influence her sleep patterns have in her moods. Recognising the fact that sometimes she spends over half the day in bed.

C1

It's like I'm fighting. It's like I'm constantly in a battle with myself, like you've got all these good things going for you C, don't let this one thing ruin you…..I dwell on things a lot….All the good memories I'll just replay in my head over and over again. Yeah, I always think like, oh my God, this is never going to happen again. I'm never going to meet anybody again

R1

Here C1 describes how her memories affect her sense of time, confining her to the past, on the one hand, and the future in the other, although recognising that the present is so much more appealing.

C1

Because I struggle with that and I struggle to connect with people on like a certain level, so for me connecting is very important, so when I do meet somebody and I feel something that's very rare, like I feel like it really scares me how I can feel that emotion because it's so rare to come by because not a lot of people have made me feel that way if that makes sense? Like not a lot of people can open that door up for me

R1

Here C1 describes her emotional state and what is meaningful to her, when she meets someone she connects with. She discloses her inner feelings and describes the rawness she feels, describing it further as both positive and scary. Her sense of one to oneness, or even unwinds of the connection, is also described

C1

Oh my God, is the biggest over thing for dissociation me. I can't even tell you how many times I question my life, like I'll be on a night out, and I genuinely sometimes feel like my life isn't real like I feel like I'm not alive. Honestly, I can't tell you how many times I've convinced myself that I'm dead and that I'm basically stuck in a coma and that all of this around me isn't real.

R1

C1's sense of reality is reality is exposed here. Although she has described herself as a substance abuser, what she describes here is both a finiteness ie death, and a lifelessness in the present, ie a coma. It's also described as a repeating pattern.

C1

This thing that happened was so vivid like I remember seeing this person stood on top me, stabbing me, but I felt it, like I could, physically feel the pain. So I came out of this thing and I just remember screaming my head off, like screaming, like I was literally in pain, like I could feel the feeling like I had been stabbed

R1

C1 then describes an hallucination she experienced. She describes, psychologically how scared she was and describes the pain as feeling it physically.

C1

I went into a different dimension like I've never been able to come back from it, like I can't tell you all the things that it's made me feel but that's

why I feel so dissociated, well, whatever the word is, from reality because I just feel like I'm not…I don't feel like I've been myself ever since it happened to me and this happened to me three years ago.

R1

C1 goes on to describe the experience as causing her to disconnect from reality and experience something quite different. She refer to her sense of self altering, causing psychological changes in her which have lasted three years to date. The experience is described as spanning time

C1

If I was to look forward, I'd see like it's a mixture of positive and negative because one thing I think about is I know that I'm going to die which is constantly on my mind. But then I also think about I know one day that everyone else around me is going to die as well. I'm going to have to live out my mum one day. I'm going to have to live without my dad. I do worry about these things, not kind of an everyday basis but it's like I see myself being successful but then I think I just know that one day, I am going to get happy but then it's going to get taken away from me because I'm going to lose somebody

R1

Asked what the future holds C1 describes her thoughts on death, her own and others'. She also looks a little more positively on the future in terms of being successful but then reverts back to the idea that her happiness will be short lived. This sense of foreboding is experienced as being mood and anxiety related, not just in the psychological sense of fearing outcomes that remain uncertain and un-experienced. If we want to understand what it means to be an authentic human being, then it is essential that we constantly project our lives onto the horizon of our death. This is what Heidegger famously calls "being-towards-death". If our being is finite, then an authentic human life can only be found by confronting finitude and trying to make a meaning out of the fact of our death.

C1

Probably past. I'm an over thinker and I think about the past a lot like I constantly think about things, how things could be different, how if I had not done this one thing, things could be different……..even though I do live in the past a lot, I also think to myself, well, if that didn't happen, this might not be happening now so it's like, again, I'm in a battle. Yeah, it really is important to me because I want happiness and I constantly want to be…I want to be successful and I want to have the perfect life. I want to have money to be able to support my mum like she has me, and I want to be able to give my sister the life that she deserves, and I want to be able to be happy with somebody like when I see a future I feel like the main negative for me is just knowing one day I'm going to have to live without people.

R1

Asked where she spent most of time thinking about, C1 says the past. C1 describes how the future is able to influence and determine the future, which she sees negatively. However as she moves between the past and future she is expressing a desire to be able to circumnavigate her prior behaviours, yet again she acknowledges the finiteness of death. There is nothing morbid about being-towards-death. Heidegger's thought is that being-towards-death pulls Dasein out of its immersion in inauthentic everyday life and allows it come into its own. It is only in relation to being-towards-death that I become passionately aware of my freedom.

C1

There's definitely got to be something else out there after this like surely we don't just die, it's like my brain just goes into all these different thought processes, and I'm just like oh my God, I don't know who's fighting with who. It's not like I'm saying I've got loads of different people inside my brain because I haven't, like I definitively not got a split personality disorder because I've not, I think I'd know, always me, but it's just like my moods and my emotions and like I say my different personalities within myself just come out in different ways.

R1

C1 is not conscious of describing her need for recognition and freedom but nevertheless continues to search in her descriptions for expressions that will allow time to heal her. She expresses how her moods pervade and how her emotions though difficult to experience and mange sometimes, might equally be guiding her. She describes herself as having different moods, emotions and personalities, which come out as puts it, or emerge, in different ways. There is no evidence of a loss of self or minds or thought intrusion, or her sense of lived and implicit temporal experience, which she frequently describes as spanning time

C1

I'm very bubbly, I'm very confident. When I'm out on a night out, I'm confident, I'll go up and speak to anybody like I'm very, you know, I like to I look after myself. I like to take pride in myself and my appearance, and I do like to think I'm a really good person because I didn't used to be like…I'd change myself loads. But behind closed doors, sometimes I'm very depressed and I feel very lonely. I'll isolate myself and I don't feel like I'm the C that everyone sees on a night out sometimes

R1

Here C1 describes different experiences, one public and one private. She refers to how she is experienced by others when she is out as being different to how she experiences herself. He sense of self spans a spectrum from confidence to low self esteem.

C1

because I started to look to the future, I look too much into the future, like I'm with him and I'm thinking about things that we're going to do together, how things would be in the future, and then at the next minute it's like, well, that's not going to happen now and all the future is just gone.

R1

Here C1 describes time on a temporal spectrum. She sometimes experiences time as being the past, future and present all in one day.

There's no ordered sense or temporal boundary, all aspects of time appear to converge.

C1

Yeah, definitely, 100%. It's like I said I can't eat when I'm in a bad mood or when I feel like shit, I can't eat. My mood affects absolutely everything for me…….
Well, it depends until it changes, until something happens that make me feel better or until I just wake up one day and I feel in a different mind-set like

R1

Asked about how her moods affect her she describes this effect as being absolute, as pervading all she does, thinks about and experiences. She also describes the temporal unexpectedness of the change that occurs to change the mood, from day to day.

C1

Trying to understand the concept of when you're going through that situation of what in your head is popping up is actually a real experience or if you're imagining it is so, so, so hard, like I can't tell you how hard it is. Like after I got to the end of my hypnotherapy, they used to do these things with me where I was going through my head and I'd open these doors and they'd ask me to explain what were behind the door and if there was certain people, and he'd asked me to imagine things but I'd be imagining something that was actually real within my brain, so. And I think for me I was trying to…it was very difficult for me to understand the realness and the imaginary. Is this actually a real thing that happened or am I making this up
I'm trying to think is this actually something that's real or am I just thinking it?

R1

Here C1 challenges the notion of reality as opposed to imagination. She describes the experience elicited via hypnotherapy, which she was receiving for her borderline a personality disorder diagnosed, as being

kind of unreal. Her sense of reality is not distorted here, nor is her sense of self delusional. She is just describing something from her past that she fails to associate with via this means. She fails to recognise the experience and so she is not sure of it did happen or if it was imagined.

C1

Hey asked me about about times when you're three, four years old which this should've worked, and it was like they're thinking like all these things are coming to my head but I'm trying to think is this actually something that's real or am I just thinking it? I do remember something when I were a kid, don't get me wrong, but like the things I'm remembering was something like I felt like I already remembered…….. I'd say a lot of my memories from the age of being 11 are very vivid. I can actually remember a lot of things and the memories that I do remember I'd say that they're very solidly vivid. I'd say there are things that I experienced and they definitely happened and I do remember them as they do like… they kind of explained my own life. This stuff they were trying to tell me about memories are like some of your memories as you go on life, they're not actually what they was at that present time because as time goes on, you defragment them, so you might remember a moment as it was but how many times you've gone back to that memory and it's actually changed in your head because you remember it different every single time. Yeah, I do understand that but I feel like a lot of the memories that I do remember as, they are what they was at that time. Like I've not defragmented anything.

R1

In this rather lengthy extract, C1 relates her own memories to the idea of fragmenting and changing. The experience of it changing as time goes illustrates her relationship with how she's feeling now, which started at the age of 11 it appears, as those memories remain vivid, and helped explain her own life as it is now. From a temporal perspective time has both endured and extended and continues to part of C1's conscious experiences, albeit in a fragmenting and changing aspect. Although for C1 she hasn't fragmented anything certain memories are not only very vivid they are real. For C1 the past ?and memories are not fragmenting. C1 in reaching back in time is doing so in a sense that she can relate to now, that continues to appear real to her now, after all this time.

END

G1

My behaviour had been strange prior because I was buying a car that I wouldn’t normally have bought and I was paying an X amount of money for it, so, it was symptomatic, that it was obvious that I was having hypomanic episodes in between each depression. I mean, I was having these suicidal thoughts, these intrusive thoughts, I've wanted to live, and I would talk myself out of them. I was severely suicidal. I was severely depressed, and I couldn't function. And I would just spend literally days just sitting, and time would drag.

R1

Here G1 is exploring her experiences in terms of its multiple effects they have on her. Experiencing time dragging being a more memorable aspect of it. This is conducive with a feeling of depression.

G1

I'm dictated by my sleep…….I’m totally, totally dictated by my sleep, but what I will do is my body clock seems to shift around when I have a sleep, when I'll sleep because I'll not be awake at 12 hours. Say, if I went to, like this morning, I wasn't early this morning because I wet the bed because I have troubles wetting the bed. That's the only thing that I do when I sleep in a deep sleep. And then, I get woken up by that.

R1

Asked about her routines and organising her time. G1 relates to her body clock and to a traditional 12 hour clock time cycle. Although she adds at a later time that she needs to take her medication which helps her sleep, so the deep sleep may be partly induced, which then in turn adds to the problem of bed wetting.

G1

I always used to get ready at the last minute. I think I had more time than I actually had……I didn't plan properly. I just couldn't work out time

R1

Here G1 explains a little about her inability to organise time. She thinks she has more time than she has, which does not indicate that time drags, although it does appear to slow down and give her a false sense of temporal security.

G1

I have no time when he's gone. It's like just time is my own. I'd do what I want, when I want. Like I'll sleep, I normally sleep and catch up on my sleep, I'm going to, being able to sleep for longer periods and 12 hours as well. And when I'm awake, I don't just stay awake for 12 hours, I'll stay awake for longer. And then I'll sleep. So, my body clock shifts around.

R1

Asked about her ability to organise time once her partner had gone to work, as an example of having to re prioritise time, she says then she has no time, which is the opposite you might say from having more time than she thought she actually had when he was there. However she goes on to add that she stays awake longer before going to bed, which is a break in her twelve hour return

G1

Sticking to the present always……I've been doing this for about 6, 7 years since I took that massive overdose. I decided back then that I was going to stop thinking of the past. But I do know that, for example, when I'm happy or stable, that time is…there's a lot abundance of time, that I'm not aware of time. I'm just living. I'm just too busy living. But now, like today for example, and as my mood gradually changes because it takes months for me to just go between a hypomanic and depression, it takes a long time. I'm aware of the time, that I've got a lot of time on my hands. Time goes slow. But lately, the past few years, I've been training my brain not to think of the past, so I don't know how this is going to…how it's going to pan out, how it's going to work out

R1

Asked about whether she finds herself stuck in the past, she says ‘always’. G1 has made a conscious decision to stop thinking about the past and that appears to enable her to focus more on the present and by doing so frees up a lot of time for her, although she may not be able to organise that free time productively although she is aware of time dragging. She continues to be dictated to by her mood swings which inhibits her. Nonetheless she continues to train herself to stay grounded in the present.

END

S1

So, in childhood, I had yeah, I probably had symptoms of some sort of mood disorder or yeah, symptoms of some mental health issues. And then when I went to university, I had some sessions of counselling again, this was due to depression, those types of things. And then when I joined the army, while I was in the army, I had a bout of depression, a bout of anti-depressants. Then I came off them. Then I went to Iraq, then I came back. Took on quite a few big things in life at that point, a lot of life events in one year in 2009. Then in 2010, so at that this point, I am at the end of 2009. I was off sick from work with severe depression, turned into psychosis, having sort of hallucinations and things. I had an in-patient admission, lots of different diagnosis were batted around. I went through multiple medications and then had my son.

R1

Here S1 describes the history of her illness putting particular emphasis on her experience of depression and psychosis.

S1

They settled on the diagnosis of bipolar disorder because it was my mood was swinging. I started coming off of an anti-psychotic that I wasn’t happy to be on. And then I was remaining on an anti-depressant Venlafaxine and that caused a manic episode. And then, yeah, then I got off all those and

that was wonderful. Yeah, and emotional sort of symptoms now rather than mood emotional symptoms which I find are different to mood symptoms.

R1

S1 confirms her diagnosis for bipolar, which appears far from certain. She pays particular attention to a perceived difference between the emotions she felt and the moods she experienced and the link with her medication. Her mood seems to have improved as a result of coming off the medication.

S1

I recall, I mean it could be fast and up to speed, sped up in a way. I'm looking back but I have little memories of much around that. It's been a very long time since I've actually, I would say I've been depressed and I'm talking about I don't think I ever was depressed. I was just a bit confused and stuck in the past. So, I've always maintained forward goals and forward thinking which isn't part of the classification of depression

R1

In response to being asked about time changing, slowing or speeding up, S1 expresses her confusion, which she attempts to link to her bipolar by saying she has always looked forward, although the emphasis again is on her depression, although she again questions if it was depression on the basis that she might have just been stuck in the past. Her lack of specific childhood memories might also suggest her sense of repression and hence depression

S1

Multiple episodes, yes, all the time, very, very, very often. But I often put that down to a mix of medication because I was on high doses of antidepressants and these antipsychotics. Most definitely, kind of mix of both of those, yeah….don't know how much you're associating time with memories….. Yeah, where has that gone? Ten years have now passed since I gave birth to my son. I don't have enough memories of that will fill the 10 years if that makes sense. I look at you know where has that time

gone? I'm just shocked at how much is burned up constantly. Yeah, and you know photos help to trigger memories definitely

R1

S1 in response to a question about a mix of manic and depressed experiences says she has experienced both simultaneously. She is very matter of fact about a question of time changing and the subjective experiences that entail. The ten years have seemed to have gone by fast for her, recounting that she has very little memory of this, although photos certainly seem to trigger some emotional response.

S1

My actual time out of the military has gone very, very fast, has been very extended. It's been forever. And I joined the Army knowing I needed that structure and routine and you know that's what I had grown up on. And I knew I would work well within that environment.

R1

Here S1 refers to the need for military type structure and organisation, which is rigid. She refers to the importance of the environment in maintaining that structure. She refers also to the time passed since that as being forever ago.

S1

During these last 12 years not once have I felt a sense of peace from or anything like that. But the worst time was 2018 when I was on one medication, an antipsychotic that was for schizophrenia but off label for bipolar quite new……Yeah. They never questioned the experience. So, what my issue was when I went into the mental health hospital with, I was severely depressed but I was having physical hallucinations…. injuries into my head and stuff. And I mean they started me on antipsychotic and olanzapine and what have you which just shut everything down my mind. My mind would not stop. I was writing reams and reams and reams to get these sorts out of my head…….Yes since I young, yes since a child I was always a faster thinker. But when I was starting on antidepressants, it got

worse and worse. But there was a time in 2018 prior to the end of the year when I was, had a manic episode where that spurred me to come off these medications, I stood playing football with my son like three or four years old and there was nothing. There was nothing. I couldn't even kick a ball with him.

R1

In this lengthy extract S1 recounts her hallucinatory experiences, which she puts down to the drugs. She says she's always been a faster thinker even when she was young, however drugs, a mix of anti-depressants and anti psychotics speeded up this process. The manic experiences that appeared to entail the medication she was taking, as refers to them, resulted in her not being able to appreciate the here and now. In fact the experiences may well have not been manic in nature, that is not originating prior to the medication. Certainly once she stopped taking them her mood and emotions changed for the better

S1

Yeah, like I said to you I mean on a few occasions, I'd come into house and I could have been out for two hours. What I felt like was two hours and I will come in and it will have been 10 minutes.

R1

Asked about any bizarre experiences of time S1 reports changes in her temporal perception, where time seems to have speeds ups, in the sense that only ten minutes had gone by, which seemed much longer. She does not report this as a negative experience.

S1

As I say, I'm very stable now in comparison. But you know if I had dropped a glass, you know as I'm leaving the house, then my reaction to that of sheer stress would add on another 30 minutes of me getting out the house. Yeah, you know, I was supposed to be out at 11 and I should've

left at 10 to but I dropped the glass at quarter to and I don't get out until 20 past. But it doesn't take that long to clean up a glass.

R1

Asked about how disturbances of time can change one's behaviour subsequently, S1 reports a disorganisation to her time, an over reaction to a small event, which would disrupt her routine. This might otherwise be considered a normal occurrence, however he description of it causing 'sheer stress' suggests her reaction may be one or irritability and, or distractibility, changing S1's mood.

S1

The idea of a sense of belonging, I certainly joined the army knowing that it was a community of like minded people with all their own experiences. I've never considered that, Jack, about a sense of identity.

R1

The session ends with a question left hanging of identity, one relating to S1's sense of belonging, identity and search for peace and contentment.

END

L1

I was assessed at least once every 2 weeks. That was about every week. I had to meet with psychiatrists at, well, face-to-face meetings. That went on until March 2006….Okay, so what was happening was I was having both episodes, but the manic episodes were never identified because it was - You know, when you seem well, you're bright, you're breezy. You know, so when I manic, I was never presenting at GPs. It was only ever when I had a depressive episode that you would present. So when the assessment started, I think they, at that point, were looking to diagnose me with depression, but then, obviously, when I explained the mood instability, that was when, obviously, they started to assess for bipolar.

R1

Here L1 describes her difficulties getting disguised. She describes the more dominant presentation of depression however subsequently she describes the following when asked about which episode was more dominant.

L1

Yeah, it varied I could be hysterically laughing and suicidal at the same time.
That's happened a couple of times since my diagnosis, and that's when I know that I'm at a danger point. Because when I have a mixed state, that's when I'm not very in control

R1

S1 describes the mixed state which is so often reported to complicate diagnosis.

L1

As far as time goes, I feel like when I have these manic episodes, time does go quickly…..then you start to stabilise and you think, "God, where has the last 3, 4 weeks gone?" Whether time actually speeds up or it just feels like it speeds up I don't know….

R1

When asked about her experience of time L1 describes time as going fast when she was feeling manic

L1

So at the time, I'm not aware of time being affected. It's really after when things start to stabilise again. I feel that the last 3, 4 weeks has been really, really quick. And it's difficult to remember things that have happened in that couple of weeks. You know, it's like my short-term memory is affected over that period of time.
So, no, something that I always noticed after the event. When there's been a manic episode, it feels like time has quickened. You know, I look back

and I think, “God, that’s been 4 weeks. You know, what the hell have I done in that 4 weeks?” And on the other token, when I have low mood, time seems to slow down, but that is subjectively. That’s when I am, you know, lying in bed and I look at the time and it’ll be ten o’clock

R1

In contrast when asked about t8me changing in relation to her moods she describes time as slowing right down in the sun of depression, indicating clearly he differences in mood and how they are temporally experienced and perceived

L1

So when that happens, things seem to be in the present. You know, life is very in the present. You know, what am I going to do today, tomorrow? That’s kind of it, If somebody said to me we’ll go on holiday 6 months down the line, I would probably at that point say no. You know, if it was a month then, yeah, there’s a possibility of that. I’m one of these when I’m going to book a holiday, I do it a couple of days before….. I kind of am a person who lives pretty much in the present

R1

Here L1 describes her sense of the present. The future seems a little behind where she is comfortable to go, even for a holiday. Remaining grounded in the present often indicates an inability to move either forward or backwards in time.

L1

I had suffered a miscarriage and it was… I was so bereft, I literally spent weeks in bed, never moved. So at that point, time stopped because, for me, there was no future. The GP that gave me the prescription for that. So they were obviously - They thought I was depressed, so when they prescribed that, I took it for about 5 days. I was then completely manic, bouncing off the walls, at which point then the referral was done, obviously, to the psychiatrist because the GP then queried why the SSRI had made me behave that way and, well, he obviously thought in the back

of his mind something's not quite right because antidepressants shouldn't do that to someone

R1

Here her sense of depression experienced a bereavement is evident. Now she describes time as stopping. There is not past or future reality or direction at this point in time. The problem of mistaking depression in grief for unipolar depression is evident here. L1 then starts to experience manic episodes due to the anti depressants

L1

It was a day-by-day basis. At that point, it was very difficult to think about the future. You know, even though… As I say, so when I've got the antidepressant, I was then manic. And then they took me off that, so then it was kind depressed again. And my mood was very up and down. You know, like some days would be good days, other days will be bad day, and it was very quickly. You know, it wasn't like I'd had over - So at that 5-month period, it wasn't as if I was manic for 2 weeks, depressed for 2 weeks. I then didn't have the structure that obviously I'd had previously, so it was more lying in to lunch time. Then I had to get up. Then it would be, you know, I didn't do cleaning……I feel like I spent like months kind of… You'd have a couple of good days, and then it would be back to feeling bad again. And I couldn't have quite put my finger on things because, well, I mean, obviously, like you say, it is a traumatic experience…….I ended up getting caught drunk driving, which was a horrific time. Well, I was suicidal, pretty much. Contemplated suicide quite a lot

R1

Asked about her experiences of time and routine following the miscarriage L1 describes how time essentially was confined to the present, a feeling and experimental which was made worse by the effects the anti depressants were having on her mood swings. The drink driving experience exemplified how horrible a time L1 was having. The culmination of the event was thoughts of suicide. This finiteness against

exemplifies her mood and her desperation for escape and freedom from her current experiences

L1

I was lying in bed and I heard somebody at my front door, and I knew the keys were in the back of the door and knew no else (audio breaking) the key to get in my house, so it was perfectly safe. However, in this episode, somebody opened the front door, walked up the hall, and at this point I panicked and pulled the covers over my head, and somebody sat in my bed. Now I pulled the covers over, fell asleep. I woke up the next day remembering this experience vividly….it seemed to last probably about 5, 10 minutes. And, obviously, I've fallen asleep. Or was I asleep and this was a dream? You know, it's weird. But, basically, what had happened from somebody knocking on the door to opening the door, to walking in, sat on the bed, to being sat on the bed and me conscious of that, maybe 5 minutes, 7 minutes. Yeah. I mean, as I say, visually I never saw anything. It was just auditory. But when I woke up in the morning, I had this feeling that it had been like a visitation dream

R1

Here L1 describes an hallucinatory experience. It has very little temporal reference however it does indicate he state of mind at the time of the miscarriage and drink driving experience, together with the mix of drugs she was taking. This is not an indication of dread of the future or of uncertain things to come but rather an expression of how she was feeling in the here and now

L1

I do feel sometimes that that's maybe just a bit of anxiety from time to time.
That's not something that I experience. But, definitely, living in the past or ruminating over something…..Yeah, I would never dread the future. The future for me is always quite positive. Apart from, as I said, back before I was diagnosed, where you felt there was no future and what's the point, kind of. But I would say since I've been medicated, I've not had very many bad depressive episodes. So, for me, I'm always looking forward to the future.

R1

L1 doesn’t dread the future. She looks positively towards it. She again describes the medication countering her depression. The fact that she can experience things in the future and there are no intrusive thoughts or delusions of reality, might indicate the psychosis was brought about not as a schizophrenic change in her mood

L1

You know, to be fair there’s a lot of my childhood, teenage years that I can’t remember. And there’s quite a lot of my past - I would say right up until probably my early 20s, probably until I was diagnosed, there’s chunks of my life that I can’t remember. I just have no memories for them. My dad was quite violent……your brain doesn’t want to remember these traumatic events

R1

Here L1 is describing the fact that her memories have been either subdued or repressed and that parts of her life are inaccessible. She finds it uncomfortable or difficult to look back in time, preferring to look forward. This indicates that L1 is not anxious about the future per se, or that she constantly ruminates on the past in some kind of depressed state.

L1

The last 20 years, I feel, have gone really quickly, especially the last 10. And as people say, as good time speeds up, and I just feel that’s what’s happening, so, yeah, I would say I’m not anxious about time as time. I’m more anxious about the fact that I’m ageing and time is then more limited

R1

Here her experience of time seems to have eased. She describes herself as feeling less concerned with time per se and more concerned with getting old. This in itself is not an anomalous experience of time.

Appendix 5: subjective anomalies of time, incorporating what is most essential about the most invariant meanings belonging to the reported experiences and resulting in a description of the general temporal structures in each case. (Giorgio & Giorgio 2017, Giorgi 2007, Englander & Morley 2021)

Structure 1: T1

T1 psychological expressed intensity towards the experience of recalling previous sexual assaults, describing the experience of recalling them as ‘painful’ and ‘prolonged’. A psychological reminder of past experiences resonated within her after read about another sex offender. An experience up until that point that she had not been conscious of. The impact of emotion on recalling the events and possibly reliving them was sudden but intense. She became more aware psychologically of time slowing down in the present from that point and ruminated alot about the past. She describes her experience as a loop of memories. The experiences she recalled being highly traumatic in nature had heightened her senses, including her hearing and made her aware of the past. Which had endured after such a long time. When memory returned to the past she used the word ‘abuse’ for the first time to describe her experience, as she became more acutely aware of what had occurred and things started to clear for her. T1 describes her memories as ‘tiny’, perhaps as as she was so young and that time was so distant, albeit not subjectively, and that’s how she knows they are real, but once the memories become more vivid she was able to recall small details and start putting the pieces of the jigsaw together. She is even able to put a numerical number to them, saying she has eight memories. When asked about her experiences of time further, whether time dragged, she describes her experience in a heightened and graphic sense, as drowning on the one hand and having to excel herself to deal with a surge of information and survive on the other. She refers to her mind as a computer, which has to process vast amounts of data, and which becomes overloaded and overwhelmed when too much information is input, which she cannot process and deal with, and which is accentuated when in work as as she works with young children with autism and adhd. The result of which is she is told to slow down. She describes time as slipping away, which makes her feel very frantic about her responsibilities. The psychological extent to which she has to push herself is evident here in the sporting analogy she uses to excel and motivate herself. At this point she starts to think of the future as the present with its loop of fresh memories, together with her day to day responsibilities, start to overwhelm her.

Structure 2: A1

A1 expresses fear, both psychologically, by making her anxious and emotionally, given her concern for her young child, and existentially, in terms of being mood related, given the fight for her identity and life with a new child, in the backdrop of Covid. She feels out of tune with the world both domestically and environmentally. A1 acknowledges that she has a problem with organising and managing her time. She refers to the present moments being overwhelming and due to the lack of attention or retentional focus regarding the past. However once focused she is able to identify graphic details and record them in the present to use them for future purposes. The lack of focus may have been due to the rise of past experiences emerging from her memory and flooding her present. A1 describes how time seems to ‘slow down’, which surprises her. An experience which is often associated with depression and negatively, where only five minutes has gone by when she thought an hour had passed. In contrast to this, A1 describes the opposite effect, as she thought an hour had gone by, when in fact only five minutes had, and she experienced this positively, having achieved so much. She might have otherwise described this experience of time as ‘speeding up’. A1 then describes her sense of time as dragging, as she watches the clock when waiting to take her son to nursery or in an evening. Then she reverts almost immediately to describing time as going by so quickly, as God seemed to have stopped the clock for her. She describes time as both appearing to last an eternity and drag forever, virtually at the same time, certainly within the same organisational flow of time, in terms of where her everyday routine is concerned. She describes her perception of time as switching rapidly from dragging one minute to flying and disappearing the next, as she aims to prepare for her daily routines, which seem affected by the temporal disruption she experiences. Again A1 describes how the disruption to the organisation of her daily routines affects her in the present and on a day to day basis. She describes herself as being very much stuck in the present. There seems no order or structure to her day to day activities. She gets easily distracted as she flits from one task to another, all of which entails a disruption to her daily routine. Her inability to focus on time or a particular routine means she appears to get nowhere fast. A1 describes how the simple task of dropping off her child at nursery turns into a logistical challenge, a task which her sense of timing and organisation constrains. She describes not being able to easily order and connect different aspects of the task

such as getting her things together, getting her child ready, having breakfast, even though it is not until the afternoon. Her organisation of time doesn't flow easily from one thing to another. She is unable to prepare however long she has to do so. She finishes of by saying that an hour for her appears to speed by without her being able to complete all her preparations and she again remains surprised how quickly it's gone by and she's failed both to notice it and do what is required within the time scale.

Structure 3: C1

C1 experiences the whole past, presser and future temporal spectrum, as she describes 'floods of emotions', 'I'm never gonna find it again' and 'I can't see, to find happiness in the present moment'. This description shows the true structure of time, in so much as an experience is never truly contained within any particular moment, or confined to any one part of the temporal structure. Here C1 again describes clearly how she's feels about something painful and past in the present and explains the context of her feelings and emotions as always being relationship related. C1 describes her sleep pattern as a vicious circle, sometimes spending over half the day in bed, which causes her to become overwhelmed and shut down. Consequently A1 describes a bad day after a disruption of her sleep as feeling emotionally drained and upset. Her mood becomes depressed and everything seems hopeless and she becomes lacking in energy and demotivated. C1 goes on to describe the effect of the upset. Time just appears to go far more slowly than when she is on a night out. However, before she know it, she has recovered and she is back out and time has once again appeared to speed up. Here C1 describes how her memories affect her sense of time, confining her to the past, on the one hand, and the future in the other, although recognising that the present is so much more appealing. This again indicates that time is not fragmented but more informed send structured. C1 describes her emotional state and what is meaningful to her, when she meets someone she connects with. She discloses her inner feelings and describes the rawness she feels, describing it further as both positive and scary. She describes how she feel like her life isn't real like she's not alive. She convinces herself that she's dead and stuck in a coma and that all around her isn't real. C1 refer to the a finiteness of death, and a lifelessness in the present, ie a coma. It's also described as a repeating pattern. C1 then describes an hallucination she experienced. She describes, psychologically how scared she was and describes the pain as feeling it physically. Although this appears hallucinatory her

understanding of time and it’s structure remains unaffected. C1 goes on to describe the experience as causing her to disconnect from reality and experience something quite different. She refer to her sense of self altering, causing psychological changes in her which have lasted three years to date. The experience is described as spanning time. Asked about the future, C1 describes her thoughts on death, her own and others, but also looks more positively on the future in terms of wanting to be successful, but then immediately reverts back to the idea that her happiness will be short-lived. This sense of foreboding is experienced as more mood and anxiety related, not just psychologically, in terms of fearing outcomes that remain uncertain and un-experienced. If we want to understand what it means to be an authentic human being, then it is essential that we constantly project our lives onto the horizon of our death. This is what Heidegger famously calls "being-towards-death". If our being is finite, then an authentic human life can only be found by confronting finitude and trying to make a meaning out of the fact of our death. C1 moves between the past and future frequently expressing a desire to be able to circumnavigate her prior behaviours, yet again she acknowledges the finiteness of death. There is nothing morbid about being-towards-death. Heidegger's thought is that being-towards-death pulls Dasein out of its immersion in inauthentic everyday life and allows it come into its own. It is only in relation to being-towards-death that I become passionately aware of my freedom. She describes herself as having different moods, emotions and personalities, which come out as puts it, or emerge, in different ways. There is no evidence of a loss of self or minds or thought intrusion, or her sense of lived and implicit temporal experience, which she frequently describes as spanning time C1 describes time on a temporal spectrum. She sometimes experiences time as being the past, future and present all in one day. There’s no ordered sense or temporal boundary, all aspects of time appear to converge. She also describes the temporal unexpectedness of the change that occurs to change the mood, from day to day. Finally C1 challenges the notion of reality as opposed to imagination. Her sense of reality is not distorted, nor is her sense of self delusional. She is just describing something from her past that she fails to associate with via this means. She fails to recognise the experience and so she is not sure if it did happen or if it was imagined. C1 relates her own memories to the idea of fragmenting and changing. The experience of it changing as time goes illustrates her relationship with how she’s feeling now, which started at the age of 11 it appears, as those memories remain vivid, and helped explain her own life as it is now. From a temporal perspective time has both endured and extended and continues to form part of C1’s conscious experiences, albeit in a fragmenting and changing aspect.

Although to C1 she hasn't fragmented anything. Her memories are not only very vivid they are real. C1 in reaching back in time is doing so in a sense that she can relate to now, that continues to appear real to her now, after all this time

Structure 4: R1

G1 takes night dosages of medication and experiences time as dragging, which she recounts as being a more memorable aspect of her condition. This is conducive with a feeling of depression. In terms of her routines and organisation of her time, G1 relates to her body clock and to a traditional 12 hour clock time cycle. Although she adds that she needs to take her medication to help her sleep. She goes into a deep sleep, which when induced by the medication, becomes a problem for her wetting the bed, the longer she sleeps. G1 explains a little about her inability to organise her time. She typically thinks that she has more time than she has, which does not indicate that time drags, although it does appear to slow down and give her a false sense of security. Her lack of temporal awareness follows lengthy periods spent sleeping. In terms of prioritising time, she says then she has no time once herb;artjerbis in work, which in some ways is a different experience to feeling you have more time than she thought she actually had when he was there. G1 appears to get lost in time. Her sense of awareness of time whether it seems to her to go faster or slower than she was expecting, remains part of the same organisational structure, of being disconnected from time over time, indicating that she may become lost or stuck in the present. She stays awake longer before going to bed when her partner is home, which is a break in the routine for her twelve hour body clock. Asked about whether she finds herself stuck in the past, she says 'always'. G1 has made a conscious decision to stop thinking about the past and that appears to enable her to focus more on the present and by doing so frees up a lot of time for her, at the same time that Ginis unable to organise her free time productively, she is sometimes aware of time dragging, even stoning still. She continues to be dictated to by her mood swings which inhibit her. Nonetheless she continues to train herself to stay grounded in the present. However being grounded in the present means she is unable to articulate and organise her time, in terms of its flow between past, present and future.

Structure 5: S1

S1 emphasises her experience of depression and psychosis and the effect of medication on her health, although diagnosed with bipolar with

psychosis. In describing its effects she pays particular attention to a perceived difference between the emotions she felt and the moods she experienced and the link with her medication. Her mood seems to have improved as a result of coming off the medication. S1 expresses her confusion about time and it's effects and the relationship with her disorder. She says despite the depression she has always looked forward to better things. She questions whether she even has depression, although she says she has experienced being stuck in the past. Her lack of specific childhood memories might also suggest a sense of repression. S1 says she has experienced both manic and depressed states simultaneously. She is very matter of fact about a question of time changing and the subjective experiences that entail. The ten years which have elapsed since she left the army, have seemed to have gone by fast for her, recounting in fact, that she has very little memory of this now, although photos certainly seem to trigger some emotional response. S1 refers to the need for a military type temporal and organisational structure, which is rigid, and now very much lacking in her life. She refers to the importance of the environment in maintaining that structure. She refers also to the time passed since that as being forever ago. S1 recounts her hallucinatory experiences, after a miscarriage which she puts down to the drugs. She says she's always been a faster thinker even when she was young, however drugs, a mix of anti-depressants and anti psychotics speeded up this process. The manic experiences that appeared to entail the medication she was taking, resulted in her not being able to appreciate the here and now and appreciating the present time with her son. S1 also reports changes in her temporal perception, where time seems to have speeded up, in the sense that only ten minutes had gone by, on more than one occasion, but which seemed much longer to her. She does not report this however, as a negative experience, although time slowing down is often indicative of feelings of depression and rumination. S1 relates to how the smallest event can disturb her. She reports how this results in a disorganisation of her time. She gives an example of dropping a glass, just as she is going out, which smashes. This might otherwise be considered a normal and small occurrence, however her description of it causes to feel a sense of 'sheer stress', which suggests her reaction may be irritability and, or distractibility, resulting in S1's mood changing quickly. The session ends with a question left hanging of identity, one relating to S1's sense of belonging, identity and search for peace and contentment.

Structure 6: L1

L1 describes her difficulties as starting with the diagnosis which took months and months to facilitate and organise. She describes the more dominant presentation of depression however she explains how she rarely presented with manic but it was there and thus perhaps went by undetected. When asked about her experience of time L1 describes it first as going fast when feeling manic. In contrast when asked about time in relation to her moods she describes it as slowing right down when finding herself experiencing depression, indicating the link between mood change and how they are then temporally experienced and perceived. Having descr*bed time as slowing down and speeding up, she also describes her experience of the present. The future seems a little beyond where she is comfortable to go, even when booking a holiday. Remaining grounded in the present often indicates an inability to move either forward or backwards in time. When describing her miscarriage, her sense of depression experienced a bereavement is evident. She describes time as seeming to stop suddenly, at which time everything comes to a grinding halt. There is not past or future reality or direction at this point in time. The problem of mistaking the experience of depression while grieving, as opposed to the full blown experience associated with bipolar, and, or, unipolar depression is evident here. L1 then starts to experience manic episodes due to the use of anti depressants. Asked about her experiences of time and routine following the miscarriage L1 describes how time essentially was confined to the present, a feeling and experience that was made worse by the effects the anti depressants were having on her mood swings. The culmination of various event, including being caught drunk driving, that L1 experienced was thoughts of suicide. This finiteness here exemplifies her mood and her desperation for escape and freedom from her current experiences. At this time, L1 describes having an hallucinatory experience. It has very little temporal reference however it does indicate he state of mind at the time of the miscarriage and drink driving experience, together with the mix of drugs she was taking. There is no indication of dread of the future or of uncertain things to come evident, but rather more of an expression of how desperate she was feeling in the here and now. L1 doesn’t dread the future as recounts. She looks positively towards it. She again describes the medication countering her depression. The fact that she can experience positive things in the future indicate that there are no intrusive thoughts or delusions of reality, which might indicate too the psychosis was brought about not as a schizophrenic change in her mood. L1 is describing the fact that her memories have been either subdued or repressed and that parts of her life are inaccessible. She finds it uncomfortable or difficult to look back in time, preferring to look forward. This indicates that L1 is not anxious

about the future per se, nor does she now ruminate on the past, indicating some kind of depressed state. Her experiences of anomalous time have seemed to have eased. She describes herself as feeling less concerned with time per se and more concerned with getting old. This in itself is not an anomalous experience of time.