

Trabalho de Projecto apresentado para cumprimento dos requisitos
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(Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa)

À minha mãe

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MENTAL HEALTH AND NEUROSCIENCE

A PERSPECTIVE FROM THE MAGAZINE MARKET

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ABSTRACT

Mental health awareness has been rising worldwide, motivated by its social and economic costs. Despite the investment in research in neuroscience in the recent years, little is known about the underlying mechanisms in the brain that are correlated with psychiatric conditions. This project, through two feature articles suitable to be published in magazines, provides perspectives onto mental health research. First it presents an example where psychiatry joins forces with neuroscience and computer science in an interdisciplinary effort to improve the life of those affected by mental disorders. The second article gathers opinions which claim that mental health research priorities should be set by patients themselves, or even that people with lived experience of mental health issues should have an active role in that research. This project was planned and researched while I was an Erasmus student at Nottingham Trent University, in the United Kingdom.

KEYWORDS: mental health, neuroscience, psychiatry, computer science, patient-centred research, scientific research, magazine, journalism, media.

RESUMO

A saúde mental tem recebido crescente interesse a nível mundial, motivado pelo impacto social e económico que traz consigo. Apesar do recente investimento em investigação na área das neurociências, pouco se sabe sobre os mecanismos que no cérebro estão associados às doenças psiquiátricas. Este projecto, através de dois artigos publicáveis em revistas, oferece perspectivas sobre a investigação em saúde mental. Por um lado mostra como a psiquiatria se pode juntar às neurociências e às ciências da computação num esforço interdisciplinar que visa melhorar a vida de pessoas que sofrem de doenças mentais. Por outro, reúne opiniões que defendem que a investigação em saúde mental deve ser centrada em prioridades definidas pelos próprios pacientes, ou mesmo que pessoas com experiência própria de problemas de saúde mental devem ter um papel activo

nessa investigação. Este projecto foi realizado no contexto de um intercâmbio Erasmus na Universidade de Nottingham Trent, no Reino Unido.

PALAVRAS-CHAVE: saúde mental, neurociência, psiquiatria, ciências da computação, investigação centrada no paciente, investigação científica, revistas, jornalismo, media.

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I Introduction

During the elective year of the MSc in Science Communication, I became increasingly interested in science writing. Being a regular reader of English and French science magazines, and writing fluently in English, I decided to use the non-elective term to develop skills in researching and writing feature articles for the English-language magazine market.

The outcomes of this learning process would be feature articles suitable for publication in science magazines or in the science section of newspaper supplements. In order to produce a coherent whole, the articles would cover the same subject through different perspectives. These different angles would receive inspiration from the diversity of points of view on science to which I had been exposed in the lectures. In the pages that follow, I describe this process, that included an international experience, and present the articles written in the course of it.

I had not decided yet the subject to write about when I happened to read the following passage from Raeburn:

The neuroscientists rarely consider the implications of their work for mental illnesses, and the psychiatrists, except those involved in research, don't understand the jargon and premisses of neuroscience well enough to grasp its import. That means, of course, that this is a wonderful opportunity for reporters to bridge that gap with stories that bring together insights from psychiatry and from neuroscience. (Raeburn, 2006, pp. 178-9)

At this time, I was doing readings in both psychology and the neurobiological basis of memory, and was captivated by this challenge. Another passage from the same author on covering topics in mental health:

Some of the best sources of information on mental health are the voluntary advocacy organisations. ... Many of these groups can also provide experts and advocates to provide counterpoint to the researchers that you interview. (Raeburn, 2006, p. 180-1)

This sounded very much in line with the topic of public engagement with scientific research that was a dominant theme in the lectures of the course. I made my mind and chose mental health as the subject of my project.

I.1 Magazine journalism and Mental Health in Nottingham

Taking advantage of the opportunity to spend a semester in the United Kingdom at the Nottingham Trent University, I applied to be accepted as Erasmus exchange student in the MA in Magazine Journalism offered by this institution. From September of 2014 until February of 2015, I attended and was assessed in two modules: Magazine Journalism Skills and Digital Production, and Communication and Ethics. In both modules I approached the assignments with this project in mind, choosing topics in mental health. Moreover, the methods and ideas that I learned in the lectures were applied to the research and writing of the feature articles that are the main outcome of this project.

Two of the assignments for the Magazine Journalism Skills and Digital Production module are included in the Appendix D of this project. The first one is a human-interest feature covering the professional life of Victoria Tischler. Tischler is a psychologist and has worked extensively in the intersection of art and mental illness. She sees art as both a therapy and as a strategy for public understanding of mental health issues.

The second assignment is a business-to-business (B2B) feature aimed to be published in a trade magazine, such as a science or medical publication. It is focused on Peter Liddle, the director of the Centre for Translational Neuroimaging in Mental Health. This centre is part of the renowned Institute of Mental Health in Nottingham, and had been launched recently by the time I interviewed Liddle in person. We covered the aims of the centre and the issues and challenges in the research translating neuroscientific findings into the clinical practice of psychiatry. This interview led to the development of the idea for the first feature article of this project.

One of the assignments for the Communication and Ethics module consisted of an essay discussing an ethical issue within the journalistic practice. I chose to research and write about the representation of mental health in the news media, its relationship with the values in the production of news and its impact on stigma and on public perceptions of mental ill health. Part of this essay served as the basis for the second section of this project, where I present a discussion about the representation of mental health both in magazines and in the news.

At the same time, I started volunteering with a Nottingham based advocacy organisation named Making Waves (MW). I was following Raeburn's advice, mentioned above, on contacting these groups to listen to the accounts of people with lived experience of mental health issues (Rae-

burn, 2006). Making Waves¹ is an organisation led by people with lived experience and willing to “challenge the current understanding about people who have experienced mental distress” (Making Waves, n.d.). I approached this advocacy group offering my reporting and writing skills with the purpose of writing news or posts that they could publish on their website or blog.

During the period of my collaboration with Making Waves, which spanned from mid-November 2014 until early March 2015, I wrote four articles. Two of these articles were reports on training sessions that members from MW, who have lived in psychiatric wards, delivered to trainee nurses at the School of Health Sciences of the University of Nottingham. The two other articles were based on interviews with members of the organisation. In the Appendix E of this project are included two of these articles, which suggest links between being detained in psychiatric wards and social problems such as racism and child neglect.

I also reached the Involvement Centre at the Nottinghamshire Healthcare NHS Trust. This centre, not unlike many others across England, aims to improve the provision of services through the feedback, support and involvement of patients, service users and their carers (Nottinghamshire Healthcare, n.d.). One of the volunteers at the Involvement Centre introduced me to a “story shop”. A story shop consists in a group of people with lived experience or still in the process of recovery, who are given a space in the Medical School of the University of Nottingham to tell their own stories to students in Medicine. Some of these students may choose to specialise in psychiatry or may become General Practitioners in health care centres where they are likely to come into contact with people experiencing severe mental distress.

My motivation to approach the Involvement Centre was to develop a personal story that could provide a human background to a feature article about research into mental health. However, there wasn't much receptiveness to this personal contact. The setting and the format of the story shop, though designed for users to share their experience of mental distress and of being treated in the mental health care system, didn't provide the environment and the time needed for a more detailed account. For this purpose, my work as a volunteer with Making Waves was much more fruitful. It is also important to say that one of the missions of MW is to challenge the mental health care system and to promote changes on how people with mental ill health are viewed in society. The Involvement Centre, on the other hand, is part of that same system.

¹ <http://makingwaves.org/>

While at the Nottingham Trent University I made extensive use of the library resources. Mental health was a new subject to me and within those five months I got acquainted with a number of topics that I felt were important before reading specialised journals and preparing interviews.

I started with a number of books on 'abnormal psychology', focusing especially on major depression. I read about its symptoms, biological, psychological and social causes and the common treatments, which also range from biological treatments to psychological and social therapies. One of the facts that quickly became evident through these readings was the tentative nature of most treatments. This reality of discoveries made by chance was later confirmed by other readings, such as Bentall (2004) and Gupta (2009). Also, some psychological treatments have effectiveness rates of the order of 50 to 60 per cent and are comparable in effectiveness to pharmacological therapy when treating depression (Comer, 2007). This clearly demonstrates the lack of a strong scientific understanding about mental depression, an illness that affects a quarter of the population in the United Kingdom (Davies, 2014).

In addition to these readings, I dedicated some time to the study of the basic anatomy of the human brain, to the physical and biological underpinnings of the most important neuroimaging technologies, to the spectrum of symptoms related to schizophrenia, and to the differences in the brain structure and activity in people with this diagnosis.

Living for some time in the United Kingdom was also an opportunity to be exposed to the dynamics of the debate around mental health issues and stigma. It is recognised that 1 in 4 people in the UK will be affected by a mental disorder over their life span and this has economic and social costs (Davies, 2014). Mind² and Rethink³ are the largest charities in the UK campaigning for better mental health care, promoting public understanding, fighting stigma and providing information for people in severe mental distress and their families and carers. Other charities, such as the Samaritans⁴ and Calm⁵, work on the prevention of suicide, one of the tragic consequences of major depression, the most common of the mental disorders. Some of these charities have joined efforts in national campaigns like Time to Change⁶ and Man Down⁷. These campaigns try to engage local authorities, civic groups, the media and the general public with events and actions that spread the

2 <http://www.mind.org.uk/>

3 <http://www.rethink.org/>

4 <http://www.samaritans.org/>

5 <https://www.thecalmzone.net/>

6 <http://www.time-to-change.org.uk/>

7 <https://www.thecalmzone.net/man-down/>

word about mental ill health and suicide. They seek to change minds and attitudes in both the people affected and in society at large, inviting people to talk and seek or offer help. They also campaign for better health care services and more money spent in mental health research.

1.2 The project

The readings described in the section above, and the contacts I made with people in Nottingham, presented to me a complex picture about mental health. This ranged from social issues and controversies between patients, psychiatrists and national services, through the stigma against the people affected by mental illness, to the lack of scientific evidence about the mechanisms in the brain and how it is affected by social and psychological factors.

This lack of scientific evidence resonated with what Raeburn (2006) said about the gap between neuroscience and psychiatry. There has been a long standing division between psychiatry and psychology, recently being challenged by clinical psychologists (Bentall, 2004) and even before by ‘critical psychiatry’ and ‘survivors’ movements (Reynolds, 2009). But, as translational neuroscience in psychiatry presents itself as the provider of the evidence that the medical model failed for many years to demonstrate, new and old questions are raised. Social and psychological factors are inseparable from mental illnesses (Davies, 2014) and it is yet unclear whether a neuroscientific discourse will widen further the gap between research into mental health and politics. Cross (2010) actually believes that brain scanning, genetics and pharmaceutical research have strengthened the medical model.

I began to explore how the research into the human brain was transforming psychiatry. The interview with Peter Liddle, director of the Centre for Translational Neuroimaging in Mental Health, pointed to me a number of paths I could follow. In particular, I became interested in exploring how images of the brain are being analysed by computer scientists to develop tools for clinical practice in psychiatry. This looked exciting for its interdisciplinary nature, in line with what Holmes *et al.* (2014) advocated in an article published in the journal *Nature*. It is also science still in the making, but with almost ten years of published findings. The topic has received yet little coverage from the scientific press and I saw here an opportunity to write an overview of the state of the art, the challenges and the promises. This could capture the interest of a science magazine, especially as there has been an increase in the global awareness of mental health issues. The product of this inquiry is the first feature article presented in the section four of this project.

Working with the Making Waves advocacy group was also a chance to meet with people who had just started doing ‘user’ or ‘survivor’-led research into mental health, that is, research where the questions, experiments and data analysis are conducted by people with lived experience of mental health issues. This kind of research is being done in the United Kingdom for more than 15 years and relates to the theme of ‘public engagement’ in scientific research (for a discussion see Wilsdon *et al.*, 2004). I was inclined to find out how the people who will receive the benefits of research were given opportunities to have their say about what should be investigated and how. However, the research led by users of mental health services have mainly been focused on these services themselves and in challenging the medical model that dominates psychiatry almost since its beginnings (Reynolds, 2009). As far as I could find, there is little research in neuroscience into mental illness that have taken on board and been challenged by people with lived experience as co-researchers. Some very recent efforts in that direction are being made by people in the field of medical humanities. My approach to write a second article for this project was to inquire about ideas, points of view and opinions about the extent of the future collaboration between neuroscientists and people with lived experience of mental ill health in the research into these illnesses. Given the social and humane nature of this topic, I opted to write for a magazine in the humanities, as this was the most likely target for publication.

I should mention a third article I intended to write and which was inspired by my interest in creative writing. After some research, I learned that the link between literature and mental illness has been extensively studied. In the field of medical humanities, it has even been used in the education of professionals in mental health, both clinicians and nurses, presenting them with insights into the inner experience of ‘madness’. On the other hand, James W. Pennebaker is probably the most renowned author suggesting the benefits of creative writing in the recovery of physical and emotional health. However, there isn't yet evidence of that therapeutic effect (King *et al.*, 2013). Nevertheless, workshops on this type of writing are quite common and promoted within the general theme of ‘arts in recovery’.

My intention was to speak with patients and workshop organisers about their experience, the challenges of writing about difficult moments of the past, their strategies and even about how their published work was received. Despite my efforts, I succeeded only in obtaining one interview with Alec Grant, the editor of a collection of personal accounts of mental illness. The lack of replies to my requests for interviews might be explained by the fact that people don't want to be associated with their mental ill health and thus, are not receptive to approaches from the media. I will however

pursue this topic in the future and hope to be more successful by extending my inquiries beyond the United Kingdom.

In the next section is presented a review of the literature on the representation of mental health in the news, specifically in the United Kingdom, comparing it with what has been studied about that same representation in magazines. It is followed by a review of the methodology used when researching and writing features articles, specially in-depth analyses, wider views and backgrounds. In that section, it is also described how this methodology was actually applied in the production of the two feature articles presented in the fourth section.

The first article is about the use of computer techniques, together with brain scanning technologies, in developing diagnostic and prognostic tools for clinical psychiatrists. It is an area of research that started less than ten years ago and is based on successes in neurology, but faces significant challenges when applied to psychiatric illnesses. The article is based on a number of scientific papers and four interviews with researchers who have produced or coordinated research in this field.

The second article covers the potential collaboration between people with lived experience of mental illness and neuroscientists in gaining an understanding of the relationship between the brain and the experience of mental ill health. It addresses the perspectives and opinions of people with lived experience, leaders of organisations and researchers.

The appendices include the questions used for the interviews and suggested query letters for both articles. The letter for the first article is addressed to the features editor of a science magazine, while the second query letter is targeted at a magazine in the humanities. In the appendices are also included four of the articles I wrote as a student in the Nottingham Trent University and as news writer/blogger for the Making Waves advocacy organisation. These articles are representative of my process of learning that was fundamental to develop and deliver the two main feature articles described above.

II The representation of mental illness in the news and in magazines

II.1 Introduction

Prejudices about mental illness are historically constructed stereotypes. They consistently link mental illness with violence and unpredictability. The subsequent repetition and reaffirmation of these stereotypes have made them ingrained in western cultures. As the values and beliefs of a culture are reflected in its systems of communication, the media coverage of mental health issues also reflects and perpetuates those prejudices (Sonwalkar, 2010).

People acquire explicit or implicit information about behaviours and social conventions through media messages. This is especially true in the areas of life where they do not have personal experience. Moreover, media reporting has been shown to be one of the important sources of information about mental illness, in addition to health professionals and health organizations (Philo, 1994; Stout *et al.*, 2004).

The distorted or biased information about the behaviours of people in mental distress, and its generalization, create a socially constructed identity which is imposed on these people (Birch, 2012). Despite the gap in the research, a number of authors suggest that this negative reporting may have an impact on people who are in mental distress (Stout *et al.*, 2004). For instance, they may hide their condition and not seek help. Even when they do seek help, they will have to struggle for their inclusion back into the community (Birch, 2012).

Whichever impact media reporting has on people in mental distress, it should concern our society at large. Mental health disorders are the single largest cause of disability in the UK and affect 1 in 4 people over their life span (Davies, 2014, p. 74). These data suggest that, potentially, a significant amount of the readers of news may be mentally unwell.

My aim here is to understand the ways in which the media produces representations of people in severe mental distress. Feature articles, whether in newspapers or magazines, have been found to offer more positive and informative portrayals of mental illness than news articles (Philo, 1994; Stout *et al.*, 2004). I will first acknowledge the specificities of non-fiction media and the context of

its production, which affect how mental health stories are shaped. With this background I will then compare and discuss the representation of mental health stories between news and feature articles.

The work of advocacy groups and anti-stigma campaigns has shown in practice some of the ways to challenge media representations. I will also highlight the important roles of the people with lived experience of mental distress and of the mental health professionals and institutions in the shaping of that change.

II.2 The context of the production of news

A number of authors have identified the need to examine the media representation of mental illness within the frameworks of journalistic practice (Harper, 2005; Henderson, 2008; Stout *et al.*, 2004; Nairn *et al.*, 2001). Stout *et al.* suggest that we may be able to challenge the representation of mental illness, and even use the media as a tool for change, if we understand the production procedures and the “forces that shape the message” (2004, p. 556).

Two of those forces are the socially constructed representations and narratives. One of these narratives is the association of mental distress with violence and unpredictability. Birch (2012) describes this stereotype as a complex tangle of meanings that time has solidified. Language, through the use of words like 'nuts' or 'schizophrenic', also helps to perpetuate these historically constructed narrative, especially when used in situations where there is no real connection with mental illness.

Like any other stereotypes, this narrative has a social dimension (Harper, 2005). Harper brings attention to studies that in fact show evidence for a modest increase in the risk of violent behaviour by people in mental distress compared to people who do not have a mental health condition. However, in pointing to the fact that mental health issues are prevalent among lower social classes, Harper suggests there might be a correlation between violence and people in mental distress, but not necessarily a causation. Violence may be caused by factors in the broader social context. Stereotypes, as simplified narratives, ignore the complexities of context and, as we will later see, they ignore also the particulars of individual cases.

How do we relate this back to the production of news? Sonwalkar (2010) argues that journalism perpetuates the values and beliefs that are either tacit or explicit in the culture of its production and consumption. Journalism is a project “that is steeped in intentional and unintentional biases at various levels: selection, language, images, framing, presentation and representation” (Sonwalkar,

2010, p. 262). This author claims that these biases are a 'primary gate' that runs before professional values like objectivity, accuracy and even ethics. In light of these claims, we are able to understand why stereotypes and socially constructed narratives are perpetuated in the news.

One important news value that relates to this is reader engagement. Readers are co-creators of media texts and the style of writing of news needs to draw upon their 'common sense knowledge' about the subject of the news story (Stout *et al.*, 2004). As Nairn *et al.* put it, "factual content is recognized as factual only in relation to the reader's common sense about the world" (2001, p. 655). This common sense understanding is shared by both writers and readers (Nairn *et al.*, 2001) and is required by their need to make sense of realities that are outside their social contexts (Sonwalkar, 2010). Journalists and readers share beliefs, narratives and cultural constructions that enable them to make sense of unfamiliar events, processes and experiences.

The fact that a community of writers and readers with a shared view of the world engage in cultural representations of social groups outside their community raises another issue. Sonwalkar (2010) observes that normal and abnormal behaviour are constructed in the course of making sense and interpreting events and contexts. "A particular image of a society is constructed as representing the interests of all; the groups and voices outside this consensus are seen as deviant, dissident or mad" (Sonwalkar, 2010, p. 266). Media discourses convert a person who has a mental health condition into a stranger, they strengthen the divide between "an 'in' and an 'out' crowd", "othering" individuals on the basis of their differing qualities (Birch, 2012, p. 17).

Journalists also have to select the news story that they believe are relevant and meaningful to their audience (Negrine, 1992). Only the events and issues that fall within the interests of the readers are considered by journalists as newsworthy (Sonwalkar, 2010). Sonwalkar suggests there is an encoding stage through which the information gathered must be filtered before it is considered relevant to be shared with their audience. The community of journalists, editors and readers are interested in only a fraction of the range of experiences lived by people in mental distress. That fraction is likely to be composed of experiences that affect them or constitute a threat to them (Sonwalkar, 2010). In any case, those are the experiences that will speak for the whole range.

After the selection stage, journalists still have to frame the news stories to make them appealing to read. Harper (2005) finds support on Signorielli (1990) and Perse (2001) to remind us that violence is overrepresented in western media. Given that violent subjects are particularly preferred in newsrooms, the mentally ill are not the only social group to be culturally associated with violence.

Stout *et al.* (2004) summarise Nairn *et al.* (2001) saying that scientific and unbiased informations are transformed through a negative framing as journalists try to find a slant that makes the news story worth telling to their readers.

Finally, journalists need to simplify their stories, finding a compromise between a story that is clear and concise but also accurate (Stout *et al.*, 2004). Magazines or columns in newspapers may offer the space and the style of writing that invite the reader into a more elaborate reflection on certain issues. More accurate and positive portrayals of mental illness have been presented in general circulation magazines and on the back pages of newspapers (Ferro, 2013; Philo, 1996, cited in Birch, 2012; Stout *et al.*, 2004). However, news are more anchored to events and characters. They often overlook the complexity of the processes and structures behind them, which are complex and ambiguous (Negrine, 1992, p. 140). They intend to be factual accounts of events as they occur. As Golding and Elliott put it, although alluding to broadcast news, “a succession of 'incomprehensible' and 'interchangeable events' succeed each other with little recourse to historical, economic or political analysis” (cited in Negrine, 1992, p. 142).

II.3 The representation of mental illness in the news media

In the previous section we analysed the forces that shape the writing of stories in the media. These forces are notably present in the production of news and impact on the representation of mental illness.

As we have seen, in order to engage the readers with their stories, journalists rely on beliefs and assumptions they suppose they share with their audience. An example is the link between mental illness and violence. In repeating and reaffirming this link, news stories perpetuate preconceptions and attitudes towards people in distress.

Additionally, journalists choose to report on events which they think are relevant to their readers. 'Relevance' in this context means quite often events that are unexpected, entertaining or constitute a threat. As Harper (2005) observes, mental illness is frequently associated with less favoured social groups and, although rarely, with violence. Journalists pick up those stories and bring them to the fore. Whichever other events related to mental health they run into, are simply ignored because journalists assume those events are not relevant to their readership. We then witness the representation of a whole group through a narrow choice of perspectives, a generalization that ignores altogether the diversity of individual experiences in mental health. Nairn *et al.* remark: “... undifferenti-

ated depictions imply that mental illness is a unitary condition, and encourage similar responses to anyone who suffers from such a disorder” (2001, p. 657).

As we saw in the previous section, journalists also have to simplify their accounts of the events in order to make them accessible, short and easier to read. They also concentrate on the narrative of events, providing immediacy and authenticity. This leaves out analysis and diminishes the depth and the complexity of the accounts of mental health issues. People in mental distress often experienced extraordinary pressures in their environment or in their bodies, usually through a “defining life moment” (Birch, 2012, p. 252). These processes, which could provide context, are largely absent in the news coverage.

II.4 The nature of magazines and the representation of mental illness in magazine articles

In comparison to news media, there have been much fewer studies addressing the depictions of mental health issues in periodicals (Stout *et al.*, 2004). Some of the most cited studies have also been criticised for failing to differentiate between media types, generalising their findings to the whole media spectrum (Harper, 2005; Stout *et al.*, 2004). This situation is not restricted to the analysis of mental health stories, but magazines in general have been overlooked by academics in media studies (Johnson, 2008).

Despite this lack of evidence, it is generally accepted that magazine depictions haven't raised the same amount of concerns that news coverage has (Philo, 1994; Stout *et al.*, 2004). This may derive from the nature of magazines. Ferber (1979) stated:

Magazines must probe, analyze, and offer background material. They must provide a broader perspective, they must synthesize and define complex issues. (cited by Johnson, 2008, p. 2)

Fjaestad (2007) observes that magazines favour accuracy more than news media in a ranked list of values. The appeal, or level of interest, is valued by both types of media, but the immediacy on which news are dependent leads journalists to choose stories that are outside of the ordinary or even suggest some kind of threat. Magazines, on the other hand, are not so much anchored to the moment, and are more rooted in the idea of community (Morrish and Bradshaw, 2012). These qualities allow journalists to search for a wider range of “interesting” topics and to cover them in greater

detail, with accuracy and balance. McKay (2013) suggests that writing features attracts journalists who enjoy having a wider choice of subjects to cover and exploring them with in-depth analysis. The fact that the content of magazines is not so attached to current events frees journalists to follow their own interests and questions (McKay, 2013).

In his defence of “thick” journalism, a term that Cottle (2010) uses to refer broadly to reportage, the author explains that this type of reporting goes beyond news headlines and agendas. It “seeks (...) to reveal something of the deep structures, contending perspectives and *lived experiences*” (p. 109, emphasis added). Lived experiences are given voice when journalists “extend access to otherwise unseen groups” (Cottle, 2010, p. 116). The inclusion of less voiced players brings to the fore hidden motivations and interests not revealed in the news, and challenges “society's meta-narratives” and “conventional thinking” (Cottle, 2010, p. 112).

Cottle's perspective on the role of reportage resonates with how Raeburn (2006) sees reporting on mental health issues:

[T]o understand psychiatry, psychology, and mental illness, and write capably about them, we ... need to get ... [in] the homes and the minds and the hearts of the families who are suffering from mental illness. (p. 177)

Raeburn also encourages speaking to voluntary advocacy organisations, which are able to provide counter points to information gathered from researchers in the field. This shift to human-interest features in the coverage of mental health issues is recognised by Ray and Hinnant (2009) in their analysis of magazine articles. These authors analysed articles about Attention Deficit Disorder in popular magazines covering a 23-year period. They observe that,

by using the human-interest stories to primarily evoke empathy, the magazines helped to normalize the disorder by making it seem as though it could happen to anyone, rather than creating a separate ‘other’ entity. (Ray and Hinnant, 2009, p. 13)

These authors even mention four first-person articles written by people with the disorder. Clearly, magazines have offered examples of deeper explorations of mental health issues and of alternative perspectives to the ones often found in the news coverage of the same subject.

II.5 The impact of media coverage on people living through mental distress

The main reason for concerns regarding mental illness depictions in news media is the impact these may have on people who suffer from similar conditions. The data presented in the introduction of this essay reveals there is a significant number of people in the UK affected by mental health issues. This means that a significant number of readers of news may actually be people in mental distress. However, it is not yet known through empirical research how these people actually receive and perceive those depictions (Stout *et al.*, 2004). There is also a lack of research analysing possible links between the portrayal of mental illness in the media and the maintenance or reduction of attitudes and behaviours in society that stigmatise people in mental distress (Stout *et al.*, 2004).

Nevertheless, we have reports of people who have lived experience of mental distress telling they felt offended or that they were not able to recognise themselves in the portrayals they found in the media (Birch, 2012; Stout *et al.*, 2004). Prejudices regarding mental illnesses and repeated in the media may also lead people to hide their condition and to not seek help (Birch, 2012; U.S. Department of Health and Human Services, 1999, cited in Stout *et al.*, 2004). As sources of information on mental health, the inaccuracies and assumptions found in media portrayals may likewise create false expectations on both individuals and their families regarding the course and outcomes of the illness (Philo *et al.*, 1994).

Furthermore, the stigmatisation perpetuated by news stories may strengthen the barriers people with past experience of mental distress usually find to be accepted in the community. These barriers may be comprised of the lack of employment opportunities (Birch, 2012) or even restrictions to their rights as citizens (Henderson, 2008; Nairn, 2001).

II.6 Towards a diversity of depictions of severe mental distress in the news media

Although magazine articles present more positive accounts of mental health issues than the ones found in the news, the latter reach a much wider audience. I believe that improving how mental health is reported in the news would have significant effects in society at large.

The challenging of media representations of mental illness must come from a joint effort of all the players involved in mental health. These are the service users themselves, clinical professionals, researchers and advocacy groups. As Nairn (1999, p. 588) puts it, they need to “convince the jour-

alists that the story will be improved by being adequately contextualised. [...] These tasks require that a relatively high level of media skills is developed and maintained.”

It is believed that portrayals of people in mental distress could be improved by using more accurate information on mental illness (Stout et al, 2004). 'Common sense' knowledge about mental illness may be challenged through the work of both clinical and research institutions along with advocacy groups. Clinical and research institutions should design outreach and engagement activities targeted at media professionals, students at different stages of the education system and the public interested to know more about mental health. These activities, common in other areas of science, should address not only the current knowledge in the field, but also show how much of this knowledge is still tentative and temporary and why scientific uncertainties and controversies are natural and must be embraced.

Advocacy groups may contribute to this challenging of the 'commons sense' knowledge in easing the contact between media professionals and people with lived experience of mental distress. These have been underrepresented in news media, but they should be promoted as knowledgeable sources about their own experiences. Electronic social media platforms and formats, such as written blogging and video blogging, are also powerful tools that both advocacy groups and people with lived experience can use to present counter-images and to have their stories heard (Ellis, 2012). As discussed above, magazine articles have been more open to this style of reporting by favouring human-interest stories or even first-person pieces written by people diagnosed with a mental illness.

Journalists select only the stories which they consider worth telling. Newsworthiness is a value which both clinical institutions and advocacy groups must bear in mind in order to promote alternative perspectives on mental health issues. When providing a broader spectrum of narratives, these institutions should think about what people look for when they read news stories. They must draw attention to narratives that counterbalance the mainly negative depictions found in news media but which are at the same time appealing, inspiring, useful and engaging.

Guidelines that encourage fair portrayals of service users and the use of appropriate wording have been put forward by advocacy groups and campaigns (Covering Mental Health Issues in the Media; Media Guidelines). These guidelines recommend the use of service users as sources and 'experts' of their own condition and invite journalists to put the person before the diagnosis.

Clinical and research institutions should also have active media or public relations offices that are ready to offer clear, concise, articulate and insightful information that gives background and

context to news stories. In this matter, I suggest the constitution of a national body which would be regarded as a point of call for journalists to ask for support on these issues.

Controversies between researchers, such as between psychiatrists and clinical psychologists, and also between the perspectives of researchers, staff in mental health services and those of advocacy groups, all contribute to a confusing and rather complex image of mental health which is difficult to translate to news writing. It is difficult to provide 'accurate' depictions in this context. Harper, supported by Shohat and Stam (1994), remarks that accuracy, by means of providing the missing information, or just by avoiding the distortion of it, is not enough to achieve a fair representation of a subject that is not simple nor transparent (Harper, 2005). A greater effort by institutions and advocacy groups is needed to offer to media professionals a range of perspectives that are scientifically sound but also useful and relevant to the readership. Deeper analyses of mental health issues are more common in magazines because these have fewer constraints of printed space and readers set aside more time to the reading of this form of journalism. Such analyses are almost absent in news stories, but the diversity of views that could nevertheless be carried in each of them would add up to a wider and more faithful account of issues of severe mental distress.

II.7 Conclusion

News media production depends on a number of factors that shape the writing of news stories. Those factors influence the representation of mental illness in those stories and this representation may have negative impacts on people in mental distress. Addressing the production values of news media, people and organisations involved in mental health may be able to promote a diversity of accounts of mental health issues.

Magazines have provided alternative ways of reporting on mental health issues. The fact that feature articles are less dependent on time constraints, and that magazines embrace a sense of community, might encourage journalists to explore more in-depth reporting and to present more sympathetic views, or at least to present counter-images and conflicting viewpoints.

Despite the fact that news are limited in space and pressed by time, I suggest that alternative portrayals are also possible in this media format. These can be achieved by showcasing and shaping stories that are useful, relevant and engaging to the news media readership. Promoting the use of people with lived experience as sources is essential. Guidelines to be followed by media professionals are also an important part in avoiding negative depictions that are not supported by real evid-

ence. Finally, media and public relations offices should work with researchers and clinical professionals to manage how the uncertainties and complexities in this field are perceived by both journalists and readers of news.

III Methodology, resources and approach

III.1 Defining feature articles

The aim of this project is to produce three feature articles, each of them offering a complementary angle onto the research in mental health. There is a diversity of types of features and features writing styles (McKay, 2013; Taylor, 2005). Many features amplify current news items with analysis, historical background and opinions or comments from experts, putting news into perspective (Hennessy, 2006; Taylor, 2005). In general, feature articles are less time dependent than news and cover topics which may be ignored by most news reporting (McKay, 2013). Here, in my approach to feature writing, I want to offer a deeper and wider coverage of a scientific subject than is normally given in the news. In choosing a subject like mental health, I also wish to present it within the context of social and cultural issues.

Despite some creativity and subjectivity involved in thinking up ideas, viewpoints and questions to ask, as well as in developing an appealing style of writing (McKay, 2013), there is a fairly common process from the idea to the finished article. As we will see, this comprises in broad terms the development of the idea, researching it, and shaping and writing the article.

III.2 The idea and the query letter

Ideas for feature articles may come from a wide range of sources. It is probably the most creative part of the process, but almost invariably the idea must be refined and assessed with a target publication in mind (Allen, 2003). It must be specific, relevant and timely, but also has to meet the style and readership of that publication (Allen, 2003; Hayden, 2013; Hennessy, 2006).

Each publication will require a different treatment: it will require you to answer the questions about the subject that its audience would ask (...) Treatment involves angle, content, structure and style. (Hennessy, 2006, p. 45)

Once choices have been made regarding content, angle and style, based on the study of back issues of the publication, the writer can approach the editor sending a query letter, or 'pitch'. This has the purpose of getting commissioned to research and write the story, but it is also a test of the idea and the first stage in the writing process (Hayden, 2013; Hennessey, 2006). The pitch requires

some preliminary research and calling a few sources to test how much the idea is grounded in reality and how focused and specific it is.

(...) the query letter should demonstrate both the strength of your idea and the strength of your writing. Some writers draft an opening paragraph or two that could work for the final story, and use them to open the query letter. It shows they've thought through the idea as a story and that they can capture the tone and style of the outlet they're pitching. (Hayden, 2013, p. 24)

III.3 Researching and finding sources

If the journalist has been commissioned to write about the proposed topic, the first thing to do, according to Hennessy (2006), is to find out as much information as possible about it. Garrison (2010, p. 60) says “research can provide vital background and depth, identify sources, and generally prepare writers for key interviews.” In fact, one of the purposes of researching is to find experts that will support the story with their perspectives (Allen, 2003; Garrison, 2010). The other goal of the research phase is to prepare the writer to understand what interviewers will say and to ask questions that will elicit interesting and insightful answers (Hennessy, 2006). However, too much background research, as Bubnoff points out (2013, p. 42), has the risk of one losing the “sense of the big picture”.

Review articles on the topic are a good starting point. They are valuable summaries of current research in the field. Their authors are also potential sources for the feature story and often cite a number of papers whose researchers may comment on specific areas related to the topic and offer complementary or opposing views (Bubnoff, 2013).

These readings, and also speaking to a few of these experts, may be done even before sending the pitch. Having a list of contacts who confirmed their availability and promised to be interviewed may help to convince editors (Allen, 2003; Hayden, 2013).

Reporting in depth about a topic demands a wider view than is found in the news. An online search using carefully chosen terminology from the topic will lead to academic papers, experts and research institutions producing knowledge in that field. The public-relations, or the media office of research centres and universities will usually help pointing to the relevant researchers among their experts. These researchers will also often guide the journalist to literature and data on the topic (Bubnoff, 2013).

Other sources to speak to can be found among the authors of the most significant papers and the authors of other papers cited in those. Bubnoff (2013) suggests to interview several sources to gain an understanding of the main ideas and questions in the field of research and also to arrive at the most important names to talk to. Hennessy summarises the whole process as follows:

After perhaps some reading for background you'll probably (...) start with people most knowledgeable about the current situation, with overview; move on to people able to comment on specific detail; ending if necessary with summing up and if appropriate speculation about the future. (2006, p. 126)

During the reporting process the journalist be taken “on fascinating detours and into dead ends,” warns Nijhuis (2013, p. 76). This author suggest that having a clear sentence summing up the main idea helps the reporter to stay on track. This sentence can be used as a reference to filter out the information that is not relevant (Nijhuis, 2013).

Allen applies to the research stage the same framework she plans to use when structuring the feature. The research is then driven by questions based on the topic areas she identified as the outline of the article (Allen, 2003).

Naturally, this kind of focus on the line of research is harder to find in the beginning, which is often very tentative. It is easier later in the process, after a few interviews and when the first draft is written. Referring to the second round of interviews, Emily Sohn says: “I know exactly what I need to learn, and I can avoid asking all those general, vague questions I asked at the outset” (personal communication to author cited by Nijhuis, 2013, p. 80). Furthermore, Bubnoff (2013) advises to write a first draft early on, as this helps to spot gaps that should be addressed in the later reporting.

III.4 Interviewing

Interviews are the means to gather information which hasn't yet been published elsewhere. But they also provide quotations which will give the article a more lively and readable tone (Allen, 2003; Hennessy, 2006). Garrison adds to these the fact that quotations “give the article an element of reality beyond the perspective of the writer” (2010, p. 100).

As opposed to a conversation, an interview is constrained by time, both the journalist's and the interviewer's. It is also driven by the journalist's agenda, or the amount of information he or she

needs to obtain from the subject (McKay, 2013). “It’s the focused, purposeful aspect of a professional journalistic interview which differentiates it from much conversation,” says McKay (2013, p. 128).

When preparing the questions to ask, the journalist must have in mind the level of knowledge the audience of the publication have about the subject. This determines the kind of questions readers would likely want answered in the article (Allen, 2003; Bubnoff, 2013). Often these are too broad and must be broken down into specific questions, but they will have to be answered in the feature article.

Hennessy suggests simple questions that ask “who, what, when, where, why and how” (2006, p. 129). Bubnoff and Hennessy agree that, in any case, questions should be open-ended, but Hennessy says they should also be specific enough to keep the interview focused and the answers clear.

Depending on the topic, the journalist may look for the aims and motivations of the interviewer, goals, results and solutions, as well as challenges, controversies in the field and how they have been addressed (Bubnoff, 2013). Finally, the interviewer should always ask in the end for other people to talk to (Bubnoff, 2013; Hennessy, 2006).

With regard to the method of interviewing, face to face is the ideal method when the journalist needs to take notes of body language and environment details, especially when writing a profile (Allen, 2003; Hennessy, 2006). Comparing to email interviews, both face to face and phone interviews are preferred when the interviewer wants to adapt the order of questions or ask new ones building on early answers. This relates to the abilities every interviewer must have, says McKay (2013): responding with relevant further questions by being a good listener and a quick thinker.

When it comes to note taking, Hennessy (2006) advises the interviewer to both record and to write during the interview. Audio recording is useful as a backup and should be kept for a couple of years in case the interviewers raise any issues regarding how they have been quoted (Allen, 2003), but recording also lets the journalist focus on the interview and the environment, and keep eye contact with the subject (Bubnoff, 2013).

III.5 Shaping and writing the article

III.5.1 The outline

At some point along the reporting process after a few interviews, the journalist should already have a clear idea of what the article will be about and the questions it should answer. Having a precise concept or theme helps to focus during the rest of the research. This theme can be expressed in a provisional title or a sentence (Allen, 2003; Hennessy, 2006). When writing the article, the facts, ideas and scenes should relate to that same sentence, says Allen. “A tightly focused topic sentence will keep you on track” (Allen, 2003, p. 67).

From the main idea, the writer can move on to outline the structure of the article. This structure can be derived from the questions the readers would ask about the subject of the article (Allen, 2003). These questions may be used to sort and filter the information collected so far.

Mapping out all the facts, quotes, ideas and anecdotes is also a helpful strategy to search for associations and links across the material (Hennessy, 2006; Nijhuis, 2013). A number of central topics will eventually emerge and these can then form the basis of the article's main sections.

Each section can have a subhead, a formal sentence that captures it's core idea or concept (Allen, 2003; Nijhuis, 2013). Moreover, the order of these sections should support the central idea of the article (Garrison, 2010). Sectioning also makes the article less demanding to the reader attention effort (Nijhuis, 2013).

With this outline in place, which may be compared to a pile of folders, the journalist can insert under each subheading, or topical sentence, the facts, quotes and scenes that relate to it (Garrison, 2010; Hennessy, 2006). Not everything in the material should be included. Part of this process consists in selecting the elements that are essential to deliver the main idea (Garrison, 2010). Allen suggests using the word budget as a reference at this early stage: “the more subtopics you include in your article, the fewer words you'll be able to allocate to each topic” (2003, p. 47). Part of the material that is left out may still be suited to a “sidebar” or a box with complementary information (Garrison, 2010).

This outline, already filled with material from the research, may inspire a first draft, without caring too much yet about quotations and details. The draft is a way of getting the ideas down while the journalist's memory is still fresh from the reporting work (Garrison, 2010; Hennessy, 2006).

III.5.2 The structure of feature articles

As most forms of writing, feature articles have an introduction, the main body and an ending. They are different from news in the sense that they usually don't follow the “inverted pyramid” structure. While the lead, or the first paragraph of news articles should include the most important information, the purpose of the lead in a feature article is to “catch the reader's attention and entice the reader to go further into the article” (Garrison, 2010, p. 91). It works mainly as a teaser or “hook”, says Hennessy (2006), and it should also set the tone and mood in which the article is written (Garrison, 2010).

The lead is the first part of the introduction. It may consist of a quotation, an anecdote or a scene that creates the atmosphere, without revealing too much of the article (Hennessy, 2006). It is followed by the “billboard” or “nut graf”, which finally tells what the article is about, providing some context or raising the central question (Hennessy, 2006; Nijhuis, 2013). The billboard “gives the readers the larger view, or big picture of the issue, or trend, or behavior being discussed in the lead, especially. We learn ... why the story is newsworthy” (Garrison, 2010, p. 93).

The ending should receive as much the same care as was given to the lead. It is what readers will remember most and should take advantage from this. In the last paragraphs the writer can sum up the article, or rephrase the most important point to remember, either with their own words, or quoting one of the interviewees. Depending on the type of feature, the ending can also offer answers, solutions, or point to future possibilities (Hennessy, 2006).

Special attention should be given to not make the ending sound like an afterthought. It should follow naturally from the lines of thought woven through the body of the article. Thus, it only substantiates the conclusions the readers arrived on their own from the evidence given above (Hennessy, 2006).

III.5.3 Writing and reviewing

In the previous section we gave an overview of the structural parts that usually comprise a feature article. Deciding what goes into each of these parts can happen before or after writing the first or second drafts. This depends on how confident the journalist is with the subject after the reporting stage.

Drafting should start with the outline described above, building sentences and paragraphs from the material. The style of writing must match the publication style and readership, for which studying back issues of the publication is recommended (Nijhuis, 2013). Here, attention should be given to tone and common structures. When writing about very specific subjects, the level of knowledge the readers have in that subject must also be taken into account (Allen, 2003). This affects not only the terminology used and the detail of the explanations, but also how serious or emotional the writing can or should be (Garrison, 2010). As Hennessy points out, “you will be wise to assume that many of [the readers] will be coming to your subject cold” (2006, p. 174), and for this reason, their interest has to be captured by using good content written with the appropriate style (Hennessy, 2006).

Additionally, writing should be simple, concise and precise in meaning, and economic in words while using the right ones. A way of writing which facilitates reading and the understanding of complex explanations favours short sentences and the basic subject-verb-object sentence structure (Garrison, 2010).

After the first draft, it is advisable to get some distance before reviewing (Garrison, 2010; Nijhuis, 2013). Then, with a clear mind, is the time to “revise the work until it seems to glide as you read it,” says Garrison (2010, p. 101). To reach such a seamless reading experience there is much work that has to be done at the detailed level of paragraphs, sentences and words. Finkbeiner (2006), citing Strunk and White (n.d.), advocates that each paragraph should contain a single idea, and that those ideas are joined together with transition sentences. To build perfect transitioning, Nijhuis suggests that “the end of each sentence should echo the beginning of the next” (2013, p. 81). Finkbeiner adds: “Transition sentences tell the reader why, having read that, he is about to read this” (2006, p. 29). This is also like writing internal leads and endings within each section, says Nijhuis (2013), which ensures the level of interest of the reader is kept high throughout the article.

After the final edited draft is finished, the journalist has to check facts, numbers, dates and names. Bubnoff (2013) recommends going back to sources and documents to confirm each of them. Here is also when the journalist has to check if all the questions raised in the beginning were effectively answered (Garrison, 2010).

With regard to the use of quotations, these should be inserted sparingly. Allen (2003) recommends paraphrasing most of the interviews and written material, leaving quotations to when the writer wants to emphasise certain ideas or insights. Journalists may also prefer to use a quotation

when they want to make clear that the idea expressed is a personal view of the interviewee and is not necessarily shared by the writer (Hennessy, 2006).

When it comes to selecting the quotations to use, Hennessy points to the fact that:

Things are said during an interview that need to be put into the whole context of the interview if they are to be interpreted correctly. [...] you must ask yourself whether what you have selected gives a fair impression. (2006, p. 135)

Some authors maintain that quotations must be kept unchanged, even when they include incorrect grammar, as they represent the characteristic way of speaking and the personality of the interviewee (Garrison, 2010; Hennessy, 2006). However, minor corrections may be acceptable in cases where the exact words and phrases may cause a misunderstanding on the part of the reader (Hennessy, 2006), or an “unnecessary embarrassment for the interviewee” (Allen, 2003, p. 64). In any case though, should it change the meaning or tone of the quotation (Allen, 2003).

III.6 The methodology applied

My approach to develop the idea for the first article was to search for research institutions in mental health in Nottingham. I was interested in finding a theme that bridged the gap between psychiatry and neuroscience and decided to interview Peter Liddle, director of the new Centre for Translational Neuroimaging in Mental Health, launched in October of 2014.

The questions I had prepared to ask Liddle were quite broad and the interview took more than one hour. A number of topics raised during our conversation were worth further investigation. I chose to do some inquiries about the use of neuroimaging in psychiatry. I started with an online search using *Google Scholar* and the keywords “translational” + “neuroimaging” + “psychiatry”, namely for papers published by Peter Liddle. Being too broad, the search didn't produce fruitful results.

I moved to apply the same search on *Google* general search engine, but now for research institutions. Cardiff University, the King's College London, the Oxford University and the American Mind Research Network were the most meaningful results, together with Liddle's own research centre.

I approached David Linden, professor of Translational Neuroscience at the Cardiff University. Linden kindly pointed me to relevant papers. From these papers, all of them were reviews, I could have a sense of the several areas being investigated within the field of translational neuroimaging in psychiatry. One grabbed my curiosity, as it involved also computer science: the application of pattern recognition and machine learning statistical methods in the analysis of brain scans for diagnostic and prognostic purposes.

I found out that not much about this topic had been covered by major science magazines such as the *New Scientist* and *Scientific American Mind*. I then searched for some of the papers referred in the reviews, but also in the Nottingham Trent University library for books where I could get an understanding of the most common neuroimaging technologies. I was able to download or print several scientific papers from the *Science Direct* website using the university intranet. I read the introduction and discussion sections of these articles and also read other papers referred in them. Progressively I gained an understanding of the aims of this line of research, its history and challenges.

With that information I compiled a list of questions, still rather broad, the ones a reader of the article I was going to write would ask. I made them more specific (see Appendix B) and reached Michael Brammer, the leader of the Imaging Analysis Research Group at the Institute of Psychiatry, Psychology and Neuroscience in London. Brammer was also one of the authors of some of the papers I had read, usually the last one in the list, which in general means he is the principal investigator. So I expected Brammer could give an overview of this line of research and put it into the context of the several disciplines: neuroscience, computer science and clinical psychiatry.

The interview with Brammer was very informative and also allowed me to verify the big picture I had made from my readings. I was acquainted enough with the subject to write the query letter (see Appendix A) and to go on reading recent papers where more sophisticated techniques were described.

At this moment I needed to go into some details, especially related with the many challenges this research appeared to be facing and were referred in the review papers. I emailed Christian Beckmann, principal investigator in statistical imaging neuroscience at the Donders Institute in the Netherlands. Failing to receive a reply, I contacted the public relations office and eventually Beckmann suggested I should speak with Andre Marquand. Marquand is a neuroscientist with a computer science background and is author of several of the papers I read. In the interview, made by

Skype, he looked very interested in my questions, which were already very specific and looked onto the future research.

I gathered the relevant information from the scientific papers and the interviews and draw a backbone of the feature article with the flow of the main topics, starting from the problem, through the goals of this field of research and to the challenges and open questions.

After completing a very brief first draft I felt I needed more inputs from psychiatrists in addition to Peter Liddle. Marquand suggested Mary Phillips, of the University of Pittsburgh, in the USA, but I wasn't able to receive a reply from her before the deadline of this project.

I contacted Vince Calhoun, director of the Medical Imaging Lab, at the Mind Research Network. Calhoun provided perspectives onto future research, for example, using brain networks, something Brammer referred to. There isn't much research into this subject yet, so I decided to leave it out. Calhoun recommended I should contact Godfrey Pearlson, psychiatrist at Yale University. Again, I wasn't able to speak with Pearlson before the deadline.

I got back to Brammer and Marquand by email to clarify a few points they covered in the interviews, and I was then ready to write the final version of the article. However, this is an area of science still in the making and will certainly elicit ideas for follow up articles.

The idea for the second article was developed in the course of my collaboration with the Making Waves advocacy group in Nottingham. I did a few readings in the university library about people with lived experience doing mental health research, and, although I was able to relate the topics and open questions to the theme of public engagement with science, I realised there was likely no research of this kind in the neurosciences. All the cases covered were related to healthcare services, or were within social sciences frameworks.

Later on I happened to read an article in the *Neuron* journal published in November written by Cynthia Joyce, CEO of a research funding organisation called MQ: Transforming mental health. The article discussed ways forward to the involvement of mental health patients in research in the neurosciences. I interviewed Joyce who suggested other organisations that I would be interested in speaking with, but confirmed that little research of this kind have been done yet in the neurosciences.

For the aims of this project I was able to gather the opinions of four interviewees, but I am still in a exploratory phase. At this time of writing I am establishing further contacts to expand this article in the near future.

Both articles were formatted following the guidelines given in the journalism classes I attended at the Nottingham Trent University.

IV Feature articles

IV.1 Machine learning methods applied in clinical psychiatry

HEADLINE: ‘Blood-tests’ for mental illnesses

SEO HEADLINE: Brain scans may be used in biological tests of mental illnesses

STANDFIRST: Computer vision is looking into the portraits of unquiet minds. Will computer-ised analysis of brain scans improve psychiatric practice?

COPY: Unlike other medical sciences, psychiatry still lacks biological tests for most mental disorders, such as depression, schizophrenia, or bipolar disorder⁸. Clinical assessments are still based on the observation of behaviours and on the description of symptoms⁹, methods which are often ineffective¹⁰ to address traits that are frequently shared across diagnostic categories. For instance, some patients with bipolar disorder may be difficult to distinguish from a diagnosis of unipolar depression. Patients may be misdiagnosed, or may be given inappropriate treatments, some of them with side-effects.

Tests based on neurobiological markers of these illnesses would supplement current clinical assessments. They could speed up diagnosis, or point towards the most effective treatment for each individual subject. This is of great clinical relevance since both pharmacological and psychological therapies are not consistently effective across clinical populations¹¹. This would abbreviate the suffering caused to patients and their carers, and lower the economic burden on society.

To tackle this problem, research findings in neuroscience have to be translated and made useful in psychiatric practice¹². Studies analysing images of the brain have suggested some abnormal structures or activity in parts of the brain of people with a psychiatric condition that could potentially be useful in the clinical setting¹³.

8 Linden, 2012

9 Hahn *et al.*, 2010; Phillips, 2012

10 Orrù *et al.*, 2012

11 Linden, 2012; Orrù *et al.*, 2012

12 P. Liddle, personal communication, November 21, 2014

13 Orrù *et al.*, 2012

However, these differences are very subtle and are found distributed across the whole brain¹⁴. Moreover, the evidence of the implicated brain regions only emerges when analysing dominant patterns in the combined brain scans from groups of patients with the same clinical profile¹⁵. The images from individual subjects, on the contrary, show large variability and, in most cases, they don't look any different from brain scans of healthy people¹⁶.

“Although mental disorders can be very disabling, they affect quite subtle things about the human mind,” says Peter Liddle, director of the Centre for Translational Neuroimaging in Mental Health, in Nottingham. “Even people with schizophrenia, most of what they say makes sense. It is only really a very small proportion of their thoughts or behaviours that is actually noticeably different, though also very disruptive.”

Liddle provides a comparison: statistically, men are taller than women, but that doesn't give you the confidence to tell for sure that a tall person is of the male sex. Some women are taller than most men, and some men are shorter than most women.

In the hospital or the clinic, psychiatrists are faced with a similar variability across people supposedly within the same diagnostic category. Ultimately they have to treat individuals, and sometimes they need to make hard guesses. This is why group studies have had little impact on clinical practice¹⁷.

A field of research applying statistics and computer science to neuroimaging, has been paving the way for the development of these tools. Scientists are using statistical methods to infer relevant information about individual patients from data collected from groups of people. To achieve this they are using very detailed spatial or volumetric digital images of the whole brain to gather as much information as possible¹⁸.

14 M. Brammer, personal communication, February 23, 2015

15 Reilly and McGuire, 2013

16 Linden, 2012; P. Liddle, personal communication, November 21, 2014; M. Brammer, personal communication, February 23, 2015

17 Orrù *et al.*, 2012; A. Marquand, personal communication, March 31, 2015

18 Linden, 2012; Rocha-Rego *et al.*, 2014; A. Marquand, personal communication, March 31, 2015

Let us illustrate their approach with the comparison given above: if we add to the body height other physical measures, such as the performance in lifting weights and so on, we feel gradually more confident in guessing the gender of a given person.

Brain imaging modalities that are being used investigate the structure and density of brain tissue, and the neural activity during the execution of a symptom-related task, such as testing the motivation to seek reward in people who are depressed¹⁹. Each modality adds a partial and complementary view onto the underlying mechanism²⁰, but scientists don't know yet which subset of these modalities is enough in each case.

Ultimately scientists want to compare the clinical information of individual subjects with that knowledge base in order to extract conclusions about them. But no human eye or mind can do that with such a wealth of data. Computer scientists, mathematicians and engineers are providing their expertise developing automatic processes.

Pattern recognition is a field of artificial intelligence where computer programmes encoding statistical methods discover regularities, or recurrent patterns in the data²¹. Researchers 'expose' one of these computer programmes to brain scans of people with a certain clinical profile, for instance, people with anxiety disorder, or people for whom psychotherapy proved beneficial²². This practice is called 'machine learning' because the programme is 'learning' to associate the images to the clinical situation in question. The programme then tries to find a pattern in the images that discriminates them from those of a different clinical group²³. An example of a relevant application would be to separate difficult cases where psychiatrists are not confident whether someone has schizophrenia or bipolar disorder.

To test if the computer programme was able to pick up the differences or not, scientists present the same programme with new images not used in the training phase, but still from people with the same clinical conditions. The programme will then try to guess which of the clinical conditions the new images belong to. In the studies published so far, the ratio of right guesses to the total

19 Hahn *et al.*, 2010; Malhi and Dewan, 2001

20 Sui *et al.*, 2012

21 P, Orrù *et al.*, 2012

22 Linden, 2012; Orrù *et al.*, 2012

23 Linden, 2012; Orrù *et al.*, 2012

number of tests, that is, the accuracy of the computer algorithm, has been in the order of 70 to 80 per cent²⁴.

The algorithm used in the process described above is called a ‘support vector machine’. This is the most popular technique applied in research investigating the applicability of these machine learning methods in developing tools for the clinical practice²⁵. “The support vector machine is the most straightforward method and is based on the idea of finding some sort of separation between two groups,” says Michael Brammer, of the Institute of Psychiatry, Psychology and Neuroscience, at the King's College London. “We tend to use other methods that give a probability of assignment to groups. We would say for example that somebody had an 85 per cent probability of having schizophrenia.”

Instead of assigning categories, these probabilistic methods recognise the continuum between traditionally defined diagnostic constructs²⁶. They also quantify the uncertainty of the prediction made by the computer, which is helpful in picking up the more ambiguous cases, or in assessing how severe, or mild the symptoms are. If the programme is able to acknowledge the fact that people may be ill to different extents, the clinician can make a balanced decision about treatment²⁷.

Most of the studies have been investigating the diagnostic value of these methods, but some researchers don't expect this to be the most promising application. The training data sets still rely on diagnoses performed on the basis of behavioural assessments, so machine learning methods can't go beyond the levels of diagnostic accuracy already reached through traditional methods.²⁸

“I think the much more interesting use of these methods isn't diagnostic, it's actually prognostic,” says Brammer. “It's this ability to see that there are changes in the brain scan before somebody gets ill, and actually predict whether they were gonna get ill or not. That means you could direct the treatment to those people who might need it and not give it to people who don't need it.”

Prognostic applications are developed using data from patients who were followed over time, so the illness course, or their response to specific treatments are well known. This could guide clinical decisions about the right treatment to new cases. “That makes a very clear case for using this kind of techniques,” says Andre Marquand of the Donders Institute, Nijmegen, the Netherlands. “It

24 Linden, 2012; Orrù *et al.*, 2012; Fu *et al.*, 2008

25 Orrù *et al.*, 2012

26 M. Brammer, personal communication, February 23, 2015; Owen, 2014

27 Klöppel *et al.*, 2012; Orrù *et al.*, 2012

28 Orrù *et al.*, 2012

could prevent the patient from having to undergo several alternatives which take a number of weeks in many cases to determine that they are effective.”

The prediction of outcomes, such as a given risk of developing psychosis, may also influence people to make informed decisions about their lifestyle, adopting preventive measures in the same way as in physical health.

But for now, these techniques are still in an experimental phase. Implemented clinical applications are unlikely to happen in the next five years, says Marquand. A number of challenges and open questions have to be addressed by future research. For instance, how useful is it in clinical practice to have 75 or 80 per cent accuracy? “Imaging technologies are good, powerful, but no way near to tell us everything about the brain, so we really need to leverage them combining multiple kinds of data,” says Vince Calhoun, director of the Medical Imaging Lab, at the Mind Research Network, New Mexico.

One question to be addressed is how generalisable the results are. These techniques will have to be translated from research settings to real clinical populations where the prevalence of the diseases varies widely. “People are complicated in all sorts of ways, ranging from other pathological things in their life, different social circumstances that may change their mind and influence what we see in their brain,” says Liddle.

Enlarging the training data set, for example combining data from different centres, is one way to address this and other issues. “Accuracy is determined on the same scanning site within the same sample, and how well is that generalised across different scanner manufacturers, across different study centres and so on, needs to be validated,” says Marquand.

“This kind of large scale validation actually requires groups of thousands of people,” says Brammer. It requires funding and a good deal of organisation between the multiple imaging centres involved.

Despite the yet high cost of doing brain scans, Brammer believes clinical applications of these methods will be cost-effective when compared to having someone in hospital who is resistant to existing treatments. That is a scenario the tools developed from these studies might contribute to eliminate by supplementing psychiatrists clinical expertise.

COPY ENDS

WORD COUNT: 1630

PULL QUOTE: The prediction of outcomes, such as a given risk of developing psychosis, may influence people to make informed decisions about their lifestyle.

COVERLINE: Brain scans may be used in biological tests of mental illnesses

TWEET/FACEBOOK: Patterns in images of the brain of their patients may help psychiatrists to prescribe the right treatment to them

INTERVIEWEES:

Peter Liddle, face-to-face on November 21, 2014

Director of the Centre for Translational Neuroimaging in Mental Health,
Nottingham, England

Michael Brammer, by phone on February 23, 2015

Leader of the Imaging Analysis Research Group
at the Institute of Psychiatry, Psychology and Neuroscience,
King's College London

Andre Marquand, through Skype on March 31, 2015

Neuroscientist at the Donders Institute, Nijmegen, Holland

Vince Calhoun, by phone on April 24, 2015

Director of the Medical Image Analysis Lab, at the Mind Research Network
Albuquerque, USA

IV.2 People with lived experience of mental health issues collaborating in research in neuroscience

HEADLINE: Are neuroscientists open-minded enough?

SEO HEADLINE: Engaging mental health service users in neuroscience research

STANDFIRST: Interdisciplinary research in mental health means taking also on board the perspectives of people with mental health issues. Are they also welcome in the neuroscience lab?

COPY: If people affected by a mental health condition are the primary beneficiaries of mental health research, to what extent can they have a say about that research, or actually engage with it? People with lived experience of mental health issues are very interested in the causes of mental disorders and in ways to prevent them for other people, says Cynthia Joyce, CEO of the London based MQ:Transforming mental health²⁹. MQ and a number of other organisations³⁰ are encouraging research that prioritises the questions and the desired outcomes of patients and users of mental health services.

At Durham University, Angela Woods is co-directing a research project called Hearing the Voice, which actually has taken on board people who have experience of hearing voices, or auditory hallucinations. This interdisciplinary project engaging members of the voice-hearing community wants to have their own descriptions and narratives at the centre of what they do.

“I think that people being able to give a rich account of their experiences can very much help neuroscientists understand some of the complexities of what they are working with, and think about the ways in which experimental design might better accommodate those experiences,” says Woods.

The Hearing the Voice project is, for example, showing that auditory hallucinations can have various sub-types, but studies into these experiences are not acknowledging these differences. Angela believes that if researchers don't recognise them, they will perhaps continue searching “in the wrong way for the wrong thing”.

²⁹ www.joinmq.org

³⁰ See for example PCORI (www.pcori.org), McPin Foundation (www.mcpin.org) and James Lind Alliance (www.lindalliance.org)

The perspectives of people who know mental disorders from the inside may bring new and relevant insights into neuroscience research and might challenge common assumptions. Alison Faulkner, an experienced researcher in mental health with lived experience herself, says: “In clinical neuroscience people might not have the opportunity to participate to the same degree as in other research areas, but would still have a lot of important things to say about the right questions to be asked.”

Exploring right at the beginning of the research the things that are valid and valuable to people with lived experience is the most important, Faulkner says. The research may be seen as a space for people to think about their own experiences in a different way. Woods quotes a participant who wanted the research context and the questions to be interesting and rewarding to her, not just to the researchers. “Sometimes neuroscientists may not be at the forefront of thinking through the implications their research might hold for some of their participants, the consequences of what it is to be asking those questions in that way in the first place,” she says.

Personal descriptions of experience are hypothesis-informing, that is, are exploratory³¹. This means that they might pose challenges to strictly quantitative approaches commonly used in 'hard' science. Joyce says: “Our effort to secure patient and service user input into early stages of scientific research and to discovery science is actually an experiment taking place right now. It's not quite clear what the best way to do that is.”

And are people kept informed about the work done in studies that were driven by their questions and priorities? “In many studies the patients are not involved in the reporting of the research results,” says Joyce. This is one of the areas where MQ sees the need for improvement.

Faulkner believes there is still a long way to go to before having as common-place the inputs of people with lived experience in the research projects that look into their own mental experiences. So neuroscientists just have to open their minds too.

COPY ENDS

WORD COUNT: 594

31 C. Hampston, personal communication, April 7, 2015

PULL QUOTE: “Exploring right at the beginning of the research the things that are valid and valuable to people”

COVERLINE: People who experience mental health issues could bring relevant insights into neuroscience research.

TWEET/FACEBOOK: Mental health research projects are listening to the priorities put forward by patients, but perhaps they should go beyond that.

INTERVIEWEES:

Clara Humpston, by email on April 11, 2015
School of Psychology, Cardiff University, Wales
(Asked to not be identified in the article)

Angela Woods, by phone on April 14, 2015
Co-director of the Hearing the Voice project
Durham University, England

Alison Faulkner, by phone on April 15, 2015
Freelance ‘survivor’ researcher in mental health, England

Cynthia Joyce, by phone on April 16, 2015
CEO of MQ: Transforming mental health, London

V Conclusions

In the course of producing this project I studied magazine writing as an exchange student at the Nottingham Trent University, and did independent study of topics in psychology, neurology, clinical neuroscience and psychiatry. I also did volunteering work with an advocacy organisation in mental health teaching and research.

The learning experience in Nottingham was a very positive one, and the choice of mental health as the subject of this project made that experience even more challenging. Mental health was a field of research new to me. As a consequence, I did perhaps too many readings before approaching people to speak to, because I wanted to make sure I had relevant questions to ask and could understand their answers.

I wrote an article that is an overview of a research field in the making (machine learning in psychiatry), and another article that is a sort of an investigation into a fairly new topic of some debate (mental health patients as co-researchers). Researching and writing both articles was very stimulating and I had the feeling I was doing something new and worthwhile.

Because the subjects were not time dependent and I didn't have a real assignment from a real magazine, most people were not able to be interviewed in less than a week. As some interviews depended on previous ones in order to inform future questions, this delayed the process of research and writing.

Unfortunately, I didn't have time to write a more extensive second feature article. The subject required some tentative approaches in the beginning before I found a definite line of inquiry, and that consumed some time.

I would like to have written the third feature about creative writing in the recovery from mental health issues. This would have given the project a third complementary view onto mental-health. As explained in the introduction to this project, writing on that topic will really require a wider investigation in order to increase the chances of finding people to speak to.

In the early phase of this project I had planned to cover a personal story as a background to contextualise research. However, it's difficult to find people willing to talk about their experience with mental health issues.

In the UK I was exposed to a very dynamic mental health movement discussing stigma, media, and the need for research funding. This is something I would like to also see in Portugal. Portuguese statistics about mental illness are not different, but there seems to be much less information. If people don't talk, and are not aware of what mental illnesses are, stigma will prevent them from seeking help, and the individual and collective suffering and cost are simply absurd and unnecessary.

Covering mental health issues, research and information in the media is one of the things that might help to change those attitudes. This project is a report of my experience in learning how to do just that.

VI References

- Allen, M. (2003). *Starting your career as a freelance writer*. New York: Allworth Press.
- Bentall, R. P. (2004). *Madness explained: psychosis and human nature*. London: Penguin Books.
- Birch, M. (2012). *Mediating Mental Health: Contexts, Analysis and Debate*. Farnham, Surrey: Ashgate Publishing Ltd.
- Bubnoff, A. (2013). Getting the story and getting it right. In: T. Hayden, M. Nijhuis (Eds), *The Science Writers' Handbook*. Boston: Da Capo Press, 2013, pp. 40-52.
- Comer, R. J. (2007). *Abnormal psychology* (6th ed). New York: Worth Publishers.
- Cottle, S. (2010). In defence of 'thick' journalism; or how television journalism can be good for us. In: S. Allan (Ed), *Journalism: Critical Issues*. New York: Oxford University Press, 2010, pp. 109-124.
- Covering Mental Health Issues in the Media. Retrieved December 3, 2014, from Mental Health Media website: <http://www.mentalhealthjournalism.org/resources-and-training/>
- Cross, S. (2010). *Mediating madness: mental distress and cultural representation*. Basingstoke: Palgrave Macmillan.
- Davies, S. C. (2014). *Annual Report of the Chief Medical Officer 2013. Public Mental Health Priorities: Investing in the Evidence*. London: Department of Health. Retrieved on January 14, 2015 from GOV.UK website: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/351629/Annual_report_2013_1.pdf
- Ellis, K. (2012). New media as a powerful ally in the representation of mental illness: YouTube, resistance and change. In: L.C. Rubin (Ed), *Mental Illness and Popular Media: essays on the Representation of Disorders*, (pp. 184-201). North Carolina: McFarland & Co, Jefferson.
- Ferro, H. (2013). A representação da saúde mental e da doença mental na imprensa portuguesa: um estudo comparativo. *Estudos em Comunicação*, 13, 37-86.
- Finkbeiner, A. (2006). Writing well about science: techniques from teachers of science writing. In: D. Blum, M. Knudson, M. H. Robin (Eds), *A field guide for science writers*. New York: Oxford University Press, 2006, pp. 26-33.
- Fjaestad, B. (2007). Why journalists report science as they do. In: M. W. Bauer, M. Bucchi (Eds), *Journalism, science and society: science communication between news and public relations*. Abingdon: Routledge, 2007, pp. 123-131.
- Fu, C. H.Y., Mourão-Miranda, J., Costafreda, S. G., Khanna, A., Marquand, A.F., Williams, S.C.R.,

- Brammer, M.J. (2008). Pattern Classification of Sad Facial Processing: Toward the Development of Neurobiological Markers in Depression. *Biological Psychiatry*, 63(7), 656-662.
- Garrison, B. (2010). *Professional Feature Writing* (5th ed.). New York: Routledge.
- Gupta, M. (2009). Ethics and Evidence in Psychiatric Practice. *Perspectives in Biology and Medicine*, 52(2), 276-288.
- Hahn, T., Marquand, A.F., Ehrlis, A., *et al.* (2010). Integrating Neurobiological Markers of Depression. *Arch Gen Psychiatry*, 68(4), 361-368.
- Harper, S. (2005). Media, Madness and Misrepresentation: Critical Reflections on Anti-Stigma Discourse. *European Journal of Communication*, 20(4), 460-483.
- Hayden, T. (2013). Making the Pitch. In: T. Hayden, M. Nijhuis (Eds), *The Science Writers' Handbook*. Boston: Da Capo Press, 2013, pp. 23-39.
- Henderson, L. (2008). Media: Reframing the Debates. In: R. Tummey, T. Turner (Eds.), *Critical Issues in Mental Health*. Basingstoke: Palgrave Macmillan.
- Hennessy, B. (2006). *Writing feature articles* (4th ed.). Oxford: Focal Press.
- Holmes, E.A., Craske, M.G., Graybiel, A.M. (2014). Psychological treatments: A call for mental-health science. *Nature*, 511, 287–289. Retrieved April 10, 2015 from Nature website: http://www.nature.com/polopoly_fs/1.15541!/menu/main/topColumns/topLeftColumn/pdf/511287a.pdf
- Johnson, S. (2008). Why should they care?: The relationship of academic scholarship to the magazine industry. In: T. Holmes (Ed), *Mapping the magazine: Comparative studies in magazine journalism*, 2008, Abingdon: Routledge, pp. 1-7.
- King, R., Neilsen, P., White, E. (2013). Creative writing in recovery from severe mental illness. *International Journal of Mental Health Nursing*, 22, 444-452.
- Klöppel, S., Abdulkadir, A., Jack, C.R. Jr, Koutsouleris, N., Mourão-Miranda, J., Vemuri, P. (2012). Diagnostic neuroimaging across diseases. *Neuroimage*. 61(2), 457-463.
- Linden, D. (2012). The Challenges and Promise of Neuroimaging in Psychiatry. *Neuron*, 73(1), 8-22.
- Making Waves. *About us*. Retrieved April 20, 2015, from Making Waves website: <http://makingwaves.org/>
- Malhi, G.S., Dewan, M. (2001). Neuroimaging. *International Journal of Psychiatry in Clinical Practice*, 5, 77-78.
- McKay, J. (2013). *The magazines handbook* (3rd ed.). Abingdon: Routledge.
- Media Guidelines: News. Retrieved December 3, 2014, from Time to Change website: http://www.time-to-change.org.uk/sites/default/files/imce_uploads/TtC%20Media%20Leaflet

- Morrish, J., Bradshaw, P. (2012). *Magazine editing* (3rd ed.). Abingdon: Routledge.
- Nairn, R. (1999). Does the use of psychiatrists as sources of information improve media depictions of mental illness? A pilot study. *Australian and New Zealand Journal of Psychiatry*, 33, 583-589.
- Nairn, R., Coverdale, J., Claasen, D. (2001). From source material to news story in New Zealand print media: a prospective study of the stigmatizing processes in depicting mental illness. *Australian and New Zealand Journal of Psychiatry*, 30, 654-659.
- Negrine, R. (1992). *Politics and the Mass Media in Britain*. London: Routledge.
- Nijhuis, M. (2013). Sculpting the story. In: T. Hayden, M. Nijhuis (Eds), *The Science Writers' Handbook*. Boston: Da Capo Press, 2013, pp. 75-86.
- Nottinghamshire Healthcare. *Get involved*. Retrieved April 2015, from the Nottinghamshire Healthcare website: <http://www.nottinghamshirehealthcare.nhs.uk/get-involved/>
- Orrù, G., Pettersson-Yeo, W., Marquand, A. F., Sartori, G., Mechelli, A. (2012). Using Support Vector Machine to identify imaging biomarkers of neurological and psychiatric disease: A critical review. *Neuroscience and Biobehavioral Reviews*, 36(4), 1140-1152.
- Owen, M. J. (2014). New Approaches to Psychiatric Diagnostic Classification. *Neuron*, 84(3), 564-571.
- Phillips, M. (2012). Neuroimaging in psychiatry: bringing neuroscience into clinical practice. *The British Journal of Psychiatry*, 201(1), 1-3.
- Philo, G., Secker, J., Platt, S., *et al.* (1994). The impact of the mass media on public images of mental illness: media content and audience belief. *Health Education Journal*, 53, 271-281.
- Raeburn, P. (2006). Mental Health. In: D. Blum, M. Knudson, M. H. Robin (Eds), *A field guide for science writers*. New York: Oxford University Press, 2006, pp. 176-182.
- Ray, L., Hinnant, A. (2009). Media representation of mental disorders: a study of ADD and ADHD coverage in magazines from 1985 to 2008. *Journal of Magazine & New Media Research* 11(1), 1-15. Retrieved February 2, 2015, from the Association for Education in Journalism and Mass Communication Magazine Division website: http://aejmcmagazine.arizona.edu/Journal/Fall2009/Ray_Hinnant.pdf
- Reilly, T. J., McGuire, P. K. (2013). Translating neuroimaging findings into psychiatric practice. *The British Journal of Psychiatry*, 203(6), 397-398
- Reynolds, J., Muston, R., Heller, T., Leach, J., McCormick, M., Wallcraft, J., Walsh, M. (Eds.) (2009). *Mental health still matters*. Basingstoke: Palgrave Macmillan.
- Rocha-Rego, V., Jogia, J., Marquand, A.F., Mourao-Miranda, J., Simmons, A., Frangou, S. (2014). Examination of the predictive value of structural magnetic resonance scans in bipolar disorder: a

- pattern classification approach. *Psychological Medicine*. 44(3), 519-532.
- Sonwalkar, P. (2010). Banal Journalism: The centrality of the 'us-them' binary in news discourse. In S. Allan (Ed.), *Journalism: Critical Issues*, (pp. 261-273). Maidenhead: Open University Press.
- Stout, P. A., Villegas, J., Jennings, N. A. (2004). Images of Mental Illness in the Media: Identifying Gaps in the Research. *Schizophrenia Bulletin*, 30(3), 543-558.
- Sui, J., Yu, Q., He, H., Pearlson, G., Calhoun, V.D. (2012). A Selective Review of Multimodal Fusion Methods in Schizophrenia. *Frontiers in Human Neuroscience*, 6(27).
- Taylor, J. (2005). What makes a good feature? The different genres. In: R. Keeble (Ed.), *Print Journalism: A critical introduction*. Abingdon: Routledge, 2005, pp. 117-128.
- Wilsdon, J. e Willis, R. (2004). *See-through Science: Why public engagement needs to move upstream*. Londres: Demos.

VII Appendices

VII.1 Appendix A: Pitches

VII.1.1 *Machine learning methods applied in clinical psychiatry*

SUBJECT LINE: Feature Pitch – Machine learning applied in clinical psychiatry

BODY: Dear [features editor],

Researchers bridging the gap between psychiatry and neuroscience are applying techniques from computer vision to analyse the brain scans of patients in the hope of improving diagnosis in clinical practice. They have developed computer algorithms that recognise specific features in images of the brain associated with common mental illnesses such as unipolar depression and psychosis. This will lead to the development of software tools to help psychiatrists to prescribe the best treatments to individuals who are difficult to diagnose with the traditional methods.

Here is a suggested intro for a 1500 words feature story:

Psychiatrists still rely significantly on a subjective analysis of patients' symptoms, either described by the patients themselves or observed by the clinician, in order to arrive at a diagnosis. Some people may live years with a diagnosis before it is changed into a different one, or may be prescribed treatments without receiving a diagnosis at all.

In the hope of developing a more accurate diagnostic system, researchers have turned to brain imaging in the hope of identifying abnormalities of brain structure or functioning that could be used as markers of specific mental disorders. However, in contrast with neurological diseases such as Alzheimer's disease or brain damages caused by a tumour or a stroke, psychiatric disorders are associated with very subtle changes in the brain. These are hard to detect and only across a large group of people. To be helpful at the level of the individual, researchers are applying computer vision techniques similar to the ones used by Google and Flickr to automatically spot meaningful features in images.

Also a suggested standfirst:

Computer vision is looking into the portraits of unquiet minds. Is computerised analysis of brain scans raising psychiatry to the next level?

So far I interviewed Peter Liddle and Michael Brammer, whose contacts are given below. I plan to interview a number of other psychiatrists and computer scientists who have published papers in this field. I also expect to contact a clinical psychologist who has been critical of traditional psychiatric methods but also of the medical model underlying some clinical neuroscience research.

Peter Liddle

Director of the Centre for Translational Neuroimaging in Mental Health
Institute of Mental Health, Nottingham, UK

Michael Brammer

Leader of the Imaging Analysis Research Group
Institute of Psychiatry, Psychology and Neuroscience
King's College, London, UK

I'm a final-year MSc student in science communication specialising in science journalism. My main interests are in neuroscience and psychology. I would be happy to send relevant cuttings on request.

I can be reached by return e-mail or at the number below.

Yours sincerely,

Sérgio Pereira

VII.1.2 People with lived experience of mental health issues collaborating in research in the neurosciences

SUBJECT LINE: Feature Pitch – Are neuroscientists open-minded enough?

BODY: Dear [features editor],

More and more research in neuroscience is being translated into psychiatry, but people with experience of living with mental health issues have had few opportunities, if any, to have their say and apply their knowledge in collaborations with neuroscientists.

A number of charities, worried about the fact that most research outcomes don't actually have an impact on patients lives, are promoting mental health research centred on the actual needs and concerns of people with a mental illness. Participatory research gives people the opportunity to propose what they think are the relevant research questions and how to address them.

I spoke with members of some of these organisations and they say that despite the challenges for both sides, partnerships between neuroscientists and people with mental ill health can only benefit research and peoples' lives.

Here is a suggested intro for a 700 words feature story:

Little is known about the processes in the brain behind the most common mental disorders, despite great progresses in neuroscience research. Perhaps scientists need some help. Looking from the outside, some people argue, is not enough to tackle the problem. Mental illnesses are very complex and two people with the same diagnosis might describe their experiences in very different ways. A patient-centred approach to research has at its heart the inner experience of people living through a mental illness. Being closer to what they are going through, even making them think by themselves about what is going on inside their own minds, may elicit the right questions and guide researchers to investigate the right thing.

Also a suggested standfirst:

Interdisciplinary research in mental health means taking also on board people with mental health issues. Are they also welcome in the neuroscience lab?

I interviewed Angela Woods, co-director of the Hearing the Voice project, at Durham University. She hopes that the research she is doing with people who have auditory hallucinations will in-

fluence research questions in neuroscience. I also spoke with Alison Faulkner, an experienced researcher in service user-led projects. I plan to speak with members of organisations promoting participatory research in mental health, such as MQ and McPin Foundation in the UK, and PCORI institute in the US.

Angela Woods

Co-director of the Hearing the Voice project
Durham University, UK

Alison Faulkner

Freelance researcher and trainer in mental health
UK

I'm a final-year MSc student in science communication specialising in science journalism. My main interests are in neuroscience and psychology. I would be happy to send relevant cuttings on request.

I can be reached by return e-mail or at the number below.

Yours sincerely,

Sérgio Pereira

VII.2 Appendix B: Questions asked in the interviews

VII.2.1 Machine learning methods applied in clinical psychiatry

- I. Origins and purpose of the research in machine learning applied in clinical psychiatry
 1. How close are we to having biological tests of psychiatric disorders in clinical practice?
 2. What started this field of research? What happened at that time?
 3. Why is it not enough to just look at images of the brain? Why do we need machine learning techniques?
 4. Why are the differences between people with a mental illness and healthy controls so subtle?

- II. Questions being asked and specific applications of the knowledge gained
 1. Regarding the main goals in this field – helping in the diagnosing, predicting illness onset and course and predicting treatment response,
 - a) Which has been the most successful? Why?
 - b) Which has been the most challenging? Why?
 2. In what cases is it useful to have a prognostic tool to assess if an individual will develop a mental disorder?
 3. How can this field of research inform the development of more effective treatments?
 - a) Including psychological and social treatments?
 4. Can the knowledge gained inform the prevention of mental disorders?

III. Machine learning techniques and approaches

1. Can we use pattern recognition techniques with whatever neuroimaging technologies?
2. What is meant by multivariate analysis when we are talking about brain scans?
3. We still lack an understanding of the mechanisms in the brain that underlie most psychiatric illnesses. How do you select the relevant features from brain scans when training the algorithms. Isn't there the risk of losing important information?
4. Is this field able to move towards a symptoms-centred approach, rather than relying on traditional diagnoses? Is it useful in clinical context?
5. Are you applying machine learning methods already being used in other fields of science, or do you develop new ones for specific needs in this field?
6. Is pattern recognition being applied to the study of brain connections as well?
7. What are the advantages of the application of pattern recognition techniques to brain networks over the former studies using whole-brain multivariate analyses?
- 8.

IV. Challenges in this field

1. What are the main challenges in this field?
2. How is the scientific community addressing them?
3. Are the reported accuracies of 70 to 80 per cent clinically relevant?
4. What can be done to improve the sensitivity of these methods?
5. Support Vector Machine has been the most widely used method in this field. It discriminates individuals between categories. However, how do you take into account the continuum between illnesses and between patients and healthy people?
6. How do probabilistic approaches address comorbidity and overlapping symptoms across illnesses? - What does this mean in practice in the clinical context?

7. The training phase of the algorithm relies on diagnoses obtained through the traditional clinical assessments. As these methods have their own limitations, how are scientists in this field addressing this?
8. Personality disorders have been less studied with these methods. Do these illnesses present difficulties to the application of methods of machine learning?

V. Towards clinical applications

1. What do you think will be the best clinical applications of these techniques?
2. Why aren't we doing large scale trials yet?
3. What initiatives have been taken towards combining data from different centres?
4. What ethical issues might be raised when doing these trials?
5. What constraints do you anticipate regarding the widespread use of these machine learning methods in the clinical context?
6. I imagine that the algorithms developed in research lend themselves to being incorporated into software and updated. Am I correct?
 - a) Is it possible to extend the training phase into the clinic or hospital?

VI. Current and future research

1. How do you convince computer scientists and mathematicians to work in this field?
2. Was there something in the past you expected to achieve with these methods and now you know it isn't possible, at least in the near future?
3. What are the next steps? What are the open questions being addressed now or in the near future?

VII. Final questions

1. Would you like to add anything else related to this that we didn't cover?
2. Who would you suggest I should also speak to?

VII.2.2 People with lived experience of mental health issues collaborating in research in the neurosciences

1. Neuroscience is an area that requires a large amount of training. What kind of collaboration can be established between people with lived experience and neuroscientists? - Can lay people go beyond defining research priorities and be allowed to design experiments, interpret data or have a say about the application of research findings?
2. Which neuropsychiatric domains are likely to benefit from this approach to research?
3. What are the challenges in translating the language of patients into meaningful research questions?
4. In what ways personal narratives may challenge the medical model in psychiatry?
5. What kind of knowledge and insight can patients bring into a neuroscientific setting?
6. How can personal narratives fine-tune scientific research questions in neuroscience?
7. What paradigms or assumptions in neuroscience may be challenged by engaging people with lived experience with scientists?
8. How are patients informed of the ongoing process of a research initiated by them?
9. Is engagement in mental health research in the neurosciences any different from engagement in physical health research?
10. How do you differentiate between patient-centred approach to research and patient engagement in research?
11. Which are the challenges to this kind of research posed by the traditional environment of academic research?
12. Are social scientists needed in every research in the neurosciences engaging people with lived experience? - Do they work as mediators?
13. How is contribution from people with lived experience framed within an interdisciplinary approach to mental health research?
14. Is it possible to have qualitative research in neuroscience? How?

15. Do you think that 'replicability' and 'objectivity' are concerns to the validity of research engaging people with lived experience?
16. Is 'experiential knowledge' inherently biased and may that compromise the evidence of the research?
17. How would you convince neuroscientists to embrace participatory research?
18. Do you see limitations in the format of current peer-reviewed journals to truly represent the results of research that has involved people with lived experience?

VII.3 Appendix C: Template for the emails approaching interviewees

Dear [...],

My name is Sergio Pereira and I am a science journalist writing about mental health and neuroscience.

I am working on a magazine article about ...

The article is aimed to be published in a specialist/science magazine.

I would like to speak with you because you are ...

I am interested in knowing (max. 3 topics)/ The areas I am interested in are / Topics I would like to cover include ...

I interviewed ... who suggested I should speak with you / ... and I would also like to hear from you on this topic.

I understand that you are likely to be very busy, but I would be very grateful if you could find the time for a Skype or phone interview.

I estimate that it would take no more than 30 minutes.

Any help appreciated.

Yours,

Sergio Pereira

Trainee Science and Technology Writer

Nottingham Trent University

Nova University, Lisbon

VII.4 Appendix D: Selection of articles presented in the context of assignments in the Magazine Journalism Skills and Digital Production module at the Nottingham Trent University

VII.4.1 From art therapy to fashion

HEADLINE: From art therapy to fashion

SEO HEADLINE: Victoria Tischler: art, fashion and public engagement in mental health

STANDFIRST: Psychology expert Victoria Tischler teaches art skills to individuals at Rampton high-security hospital to help them recover from mental distress, but she explains that art and fashion may also be effective in reducing stigma.

COPY: Since the 19th century artistic works produced by people with mental health problems have inspired movements in the professional art world. When so much is talked about mental health awareness, psychologist Victoria Tischler, says art can also promote public understanding of mental illness.

Victoria, a senior psychology lecturer at the London College of Fashion, began her work with art and creativity in her late teens. At that time, as part of her first degree, she worked in a psychiatric hospital, in Sidney, Australia. She says it was “an old-fashioned Victorian-style asylum and still had a moat around it, albeit without water in it. It was a frightening place for a young woman.”

She worked in a ward which housed people who had behavioural problems. Many patients had difficulty communicating or wouldn't speak at all.

“I began to make art with them and noticed that people became alert and focused and that the activity seemed to calm them. Some who couldn't or wouldn't speak produced the most complex and intriguing work.”

Victoria found that, when people feel certain things to be too painful to say or speak, drawing and painting were alternative modes of communicating past experiences.

After working in a community mental health team, Victoria has done academic research and has become increasingly interested in the relationship between creativity and mental illness.

Returning to the work she had done as a student, Victoria now works with patients at Rampton, one of three high-security hospitals in England, located in the Nottinghamshire countryside.

She contributes to the Recovery College, which aims to give people abilities to help them recover from mental health problems.

“This is the most marginalised and isolated population,” Victoria says. The most common illnesses diagnosed among the attendees are schizophrenia and personality disorders. “My sessions specially focus on developing artistic skills which they are able to use as part of the recovery.”

She asks patients in advance to choose a theme. This may be a general concept like 'hope'. Giving people choices encourages engagement in the session, even from people that is normally very withdrawn, says Victoria.

Early in the session she gives examples of trained and untrained artists who have used art to describe and work through their mental distress. “I then choose an artistic technique, such as block printing, which each person uses to create art. The time is then spent making and discussing art made in session.”

Promoting artistic expression as a means to communicate and recover from mental illness, Victoria Tischler organised regular exhibitions of art works by service users at the Institute of Mental Health, in Nottingham. Some works even became part of the building where she was arts coordinator from 2009 until earlier last year. Victoria says that art made by people with mental health problems shows that they can be uniquely talented. She gives the name of Nick Blinko (<http://www.outsiderart.co.uk/blinko.htm>) as an example of an artist who has been able to present his work in art galleries internationally.

That was one of the ideas behind the exhibition “Art in the Asylum: creativity and the evolution of psychiatry”. Curated by Victoria and Esra Plumer, it was held at the Djanogly Gallery, at the University of Nottingham in 2013. It charted the diagnostic and therapeutic use of art in British asylums from 1832 to 1970 and addressed the role that asylum art played in modern and contemporary art movements.

Victoria says that, from the visitors’ feedback, she was happy to know that the exhibition changed their ideas about people who are mentally ill and about the way they are treated. She believes that art is an effective means to educate and create positive interest in mental health.

“Art offers a way to discuss the often difficult but always fascinating subject that is mental health.” She also tries to involve professional artists because she thinks high-profile artists are able to promote a wider level of engagement.

Now at the London School of Fashion, Victoria is teaching her creative students to look at fashion and explore clothing through the insights of psychology.

She says: “The way we dress ourselves is a reflection of our identity, of our mood and self-esteem. If you look in institutions that provide mental health services, often people have very limited access to fashionable clothing. There is some small-scale research which suggests that, depending on our mood, we choose particularly different types of clothing, but people within institutions have much less choice. It might be interesting to see if fashionable clothing does improve their well-being.”

Victoria also thinks that, because all of us wear clothing, fashion has also the potential to be a powerful way to engage society in mental health issues.

COPY ENDS

WORD COUNT: 788

PULL QUOTE: “Art offers a way to discuss the often difficult but always fascinating subject that is mental health.”

COVERLINE: From art therapy to fashion, Victoria Tischler and the role of art in mental health.

TWEET: Art helps people recover from mental health problems, but art and fashion may also challenge society's preconceptions and reduce stigma.

PUBLICATIONS: The Psychologist, New Scientist (Science in Society section), Mind (Scientific American)

VII.4.2 Portraits of unquiet minds

HEADLINE: Portraits of unquiet minds

SEO HEADLINE: Peter Liddle is leading a research group that uses the analysis of detailed images of the brain to improve the diagnosing and treatment of mental health problems.

STANDFIRST: Peter Liddle and his research group aim to take scientific information about how the brain works and make it reliably useful in diagnosing and suggesting the best treatment in clinical practice.

COPY: Liddle, a psychiatry expert in his 60s, is the director of the new Centre for Translational Neuroimaging at the Institute of Mental Health, in Nottingham, launched on the 30 October. His multidisciplinary team has five permanent researchers and around 20 contributors.

Sophisticated technologies have been used for 20 years or more to produce images of both the structure and the functioning of the human brain. But the brain is a very complicated organ, and one that varies widely between people. Liddle says that this complexity and variability make it difficult to translate and use in practice the information we already have.

To add to this, quite subtle things about the mind are affected by mental disorders, although they may be very disruptive. Liddle says: “Even a person with schizophrenia, most of what they say makes sense, most of what they feel are emotions that any other person would have in similar circumstances”.

So is without surprise that the range of measurements made in the brains of healthy people and of patients with anomalies can overlap rather significantly. This makes it difficult to use that information to reliably diagnose individuals.

“At the moment we can only draw statistical conclusions for groups of people,” Liddle says, but “the key thing is that you have to be able to draw useful conclusions about one person.”

It is by adding more and more information that Peter Liddle and his group of researchers expect to make better predictions for individual cases. Typically, any one image of the brain may show 50, 000 measurements. That is enough to make confident predictions once they have developed the mathematical procedures to analyse all that data.

“I was appointed here in Nottingham in 2001 to really get this thing going, but it is only really in the past year or so that I am now fairly confident that we can really use this in practice,” Liddle says.

The Centre for Translational Neuroimaging is so far focused on three mental health conditions. “Schizophrenia is the most seriously disabling of the mental disorders that affect young and middle aged adults,” Liddle says. “Roughly speaking, one in a hundred people sometime in their life will have schizophrenia,” he adds.

Liddle also considers Attention Deficit/Hyperactivity Disorder (ADHD) an important problem due to its effects on childhood development.

His team also studies depression because it is very common and the existing treatments work for some people but not for others or have no long-term effect.

“Where I think our research group is unique is in saying that we should put a lot of effort into getting improved predictions in the next couple of years, whereas other people would be saying ‘Let’s really understand the whole thing better’”. Liddle says that more 30 years are needed to be able to say for certain that a given person has schizophrenia. But if in three years time his team could prove that imaging information could be used on an individual to predict the evolution and the effectiveness of treatment in early psychosis, he would consider that to be a wonderful achievement.

COPY ENDS

WORD COUNT : 521

COVERLINE: Detailed images of the brain may reveal the fingerprints of mental disorders.

PULL QUOTE: “Where I think our research group is unique is in saying that we should put a lot of effort into getting improved predictions in the next couple of years.”

TWEET: The analysis of detailed images of the brain may lead to almost accurate predictions of early mental health conditions.

POSSIBLE PUBLICATIONS: The Institute of Mental Health blog or website, the Mental Health Review journal, or the news or reviews section of a journal on neuroscience or psychiatry.

VII.5 Appendix E: Selection of articles written in the context of the collaboration with the advocacy organisation in mental health, Making Waves

VII.5.1 Cross-cultural issues in Mental Health: a conversation with Jeremy K.³²

HEAD: Cross-cultural issues in Mental Health: a conversation with Jeremy K.

STANDFIRST: Jeremy K., a survivor at Making Waves, advocates that mental health care professionals should be open to learn about the cultural background of their patients.

COPY: Jeremy K. is surprised at the lack of ethnic minority psychiatrists, nurses and other health care providers that have an important role in mental health care. When presenting his observations as a consultant to the Implementing Recovery through Organisational Change ([ImROC](#)) initiative, Jeremy K. received a honest reply from one psychiatrist. The clinician said he was treating mainly minority patients, but he didn't know how an African-Caribbean person is like when he is not unwell.

A number of studies have shown that African-Caribbean people are over-represented in British psychiatric hospitals. Within Black and Minority Ethnic communities, Caribbean people are the most diagnosed with psychosis, [revealed a survey](#) commissioned by the Time to Change campaign and published in March last year.

It has been suggested that white psychiatrists might misunderstand the culturally encoded experiences of African and Caribbean people. Stresses associated with racial discrimination may also account for this over diagnosis. Jeremy K., who was a self-employed pharmacist when he was sectioned ten years ago, says he was stopped by the police more than once for no apparent reason while driving his BMW.

Richard Bentall, in his 2003 book “Madness Explained”, suggests that African-Caribbean people express distress in a way that is perceived by northern Europeans as aggressive and leads to intervention by psychiatric services. Jeremy K. says most of it has to do with misinterpretation of cultural cues.

“When we speak, we tend to break eye contact a lot, and people see that as being unwell. It is not. It's just something we do naturally to decrease the sense of aggression, because we are passionate people when we speak.

³² Name has been changed

“What I would call for in immediate effect is more cultural competence among professionals,” says Jeremy K. “Socialize with us, see what makes us laugh, see what makes us cry, what makes us happy or sad.”

On his journey through the mental health care system, very seldom had Jeremy K. the chance to have his voice heard. He confirms what Richard Bentall writes about psychiatric wards today: psychiatrists see their patients for only a few minutes every week and psychologists prefer to work in outpatient clinics.

How can mental health care services in psychiatric wards become culturally compatible? Jeremy K. sends an invitation to practitioners: “When it comes to working cross-culturally, get to know your patients, get some practical experience with them. If you know of a ceremony, find yourself down there, or if you get fifteen minutes in the day, listen to KEMET FM for the music we listen to.”

Jeremy K. hopes that more cultural understanding will help professionals to refrain from pathologising cultural differences.

COPY ENDS

WORD COUNT: 434

PULL QUOTE: “Socialize with us, see what makes us laugh, see what makes us cry, what makes us happy or sad.”

FACEBOOK/TWEET: Jeremy K.: More cultural competence is needed among professionals to avoid over diagnosis.

ENDS

VII.5.2 How can acute wards and forensic units become true spaces for recovery?

HEADLINE: How can acute wards and forensic units become true spaces for recovery?

STANDFIRST: Living in a ward is itself a trauma. Patients live in a controlled environment and feel themselves unlistened to. Ruth and Geoff³³ shared their stories of resilience with Nursing students.

COPY: How can staff in acute wards and forensic units really help people in their recovery? This was one of the questions raised by Ruth H. in a recent [PINE](#) session held in the Queen's Medical Centre. Ruth is a survivor in her twenties who recently joined Making Waves. In the session, she shared with the Nursing students her journey from her childhood of neglect and abuse, through her teenage years living in hostels and struggling with addiction, and eventually being detained within the mental health care system.

Ruth said that her experience of living in wards was a trauma while she was struggling to heal from another trauma. “I felt very unlistened to, I felt unheard. I felt very invisible. I was desperate to be seen as a human being,” she said. Her behaviours and whatever she said, were seen through her diagnosis. She received a diagnosis of bipolar disorder. It did not mean anything to her, it was like putting her in a box. “I’m not a diagnosis. I’m Ruth,” she said.

Geoff T., also a new member of Making Waves, was with Ruth delivering the session. Geoff, a former journalist and published author, now in his fifties, shared his story of alcohol addiction and his path to complete recovery six years ago. He supported Ruth in saying that very often his back-story was overlooked. Geoff said: “It’s infuriating that everything you say gets red through your drinking!”

[Julie Gosling](#), training and education co-ordinator at Making Waves, addressed the students: “Our stories don’t come in a logical way, but through metaphors that not even us can understand clearly. It’s a challenge for you nurses, to try to make sense of them.”

Distress can produce behaviours which are difficult to understand. Ruth spoke to the students about the “unbearable painful feelings” she experienced in the past. “I wanted to get out of it very quickly because it was unbearable. Emotions are very overwhelming and they affect your thoughts.” Ruth said that her self-destructive behaviours were actually a strategy for surviving those emotions.

33 Names have been changed

Many things seem contradictory to someone who have never been in those places of deep distress. To Geoff, addiction was something out of his control. “We use it as a kind of self-medication. It's the only thing you can do because you know it works.”

To Geoff, distress can mean an unexpected phone bill, the cat being sick, or simply the weather. The common daily tasks can be distressful. Ruth said: “I survive the bus, I survive shopping. Everyday I survive.” When talking about feeling at last sober and clean, Geoff said: “How do you celebrate for feeling good again? You celebrate with a drink, having a beer. Drinks are everywhere. The threats are still there.”

When people like Ruth and Geoff find themselves in acute wards, what they need is kind and compassionate staff. “We need the nurses to tell you there's a light at the end of the tunnel,” Ruth said.

However, acute wards and forensic units are controlled spaces. Every room is locked and only the staff have the keys. Even to use the facilities or the phone, the service users have to ask permission to a nurse. If nurses are busy with their paperwork, they have to wait. This imbalance of power between staff and service users creates conflicts. Nurses, doctors and users have different lived experiences and see things differently. Perceptions are relative, said Ruth. “Why do you have the power to say my perception is wrong?,” she asked. Patients in acute wards are seen mainly through what they did in the past, rather than an understanding of why they did it.

“I felt myself not wanted in a place where I was detained and didn't want to live,” Ruth said. Are these true spaces for recovery? In a forensic unit, people who already are in distress and feel vulnerable, have to leave their personal clothes and wear a blue dress, “which is degrading, especially for women,” Ruth said. This is a straight attack at one's identity and self-esteem, and has a long way to go before we can call it a path to recovery.

One of the students in the PINE session said that, while doing practical training in an acute ward, she played pool with the patients. She was told by the nurses that she wouldn't be able to do that once she was qualified. “There is a pressure on the nurses to complete the mandatory tasks, and patients come next,” Ruth said. Then Geoff told his story of a nurse who used to play chess with him. “It was probably the most useful therapy in years!,” he said.

Like that nurse, there are nevertheless, many excellent professionals among the staff. Ruth was fortunate enough to have met some of them in the last year. This changed her life for the better. She now has a home, lives back with her child and she will be attending college in September.

Julie said, addressing the students in the session,: “We believe in you as the next generation of nurses. You now still have fresh eyes to see what isn't right in the system.”

Answering to Ruth the question with which I started this article, the Nursing students in the session said they would take time to talk to service users, try to imagine themselves in their shoes and listen to their stories before reading whatever was written in their notes.

I would also add one of the things Ruth said: empathise with the patients and recognise their resilience, the resilience to have lived through their life before the ward and to still live it now in the ward.

COPY ENDS

WORD COUNT: 962

FACEBOOK/TWEET: How can acute wards and forensic units become true spaces for recovery?