Chapter 8
Visual Arts, Mental Health, and Technology

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Abstract There are a growing number of research projects in the UK in the field of health and well-being that involve artists utilizing new technologies. This chapter explores current examples of nationally funded projects, exhibitions, and artworks that directly relate to public perceptions of mental health. Lessons learnt from the problems and difficulties encountered by artists collaborating with medical professions are a focus, as is the importance of the medium of video and the use of new technologies such as virtual reality in facilitating the implementation of innovative ideas that have made a significant contribution to the field of arts in health. Anguish and distress are fundamental characteristics of the Western artistic tradition, particularly since the Enlightenment. The visual arts offer opportunities to explore inner personal experiences. Psychiatry has historically used reductionist methods to measure some of these experiences such as mental disorder. Although there has been progress, there has also been an increasing dissatisfaction with the way that reductionist science can drain meaning and lived experience out of its understanding of mental illness. Artists acknowledge that much of our emotional experience is preverbal or nonverbal and occupies an experiential space that is dream-like and difficult to express through words. This chapter investigates the work of several contemporary international artists—individually, and collectively in exhibitions. These include artists using multimedia and those exploring the use of technology in remote locations with vulnerable adults and young people. Several films, videos, animations, documentaries, and online projects involving various public sector organizations and groups of people are also discussed. The lessons learned from collaborative and cross-disciplinary projects are summarized. A research project on art and science continues earlier work where the authors were part of an interdisciplinary research team which completed a pilot study with people attending a mental health outpatient clinic called *In-between-ness* (www.in-between-ness.co.uk). The original objective was to develop and test methods which could be used to explore the experience of people with a diagnosis of depression as their perception of themselves and the world around them changed through the course of antidepressant treatment. During the pilot, the method was refined and improved, largely as a response to the research participants, who had a strong and distinctive voice. Guided by experts, dialogues and engagement within the

collaboration created added value. The chapter concludes by discussing how an expanded team is now ready to conduct a large-scale study using the method they have developed.

Keywords Interdisciplinarity · Practice-based research · Practice-led research · Research impact · Innovation in art and design · Collaboration in the visual arts · Art/science · Artists moving image · Virtual reality (VR) and the arts · Arts in health · Visual arts and healthcare · Post-traumatic stress disorder (PTSD) · *In-between-ness: windows within*

8.1   Introduction

Fine art is no stranger to the world of mental health. History shows some respected artists' battles with depression in the works of Van Gogh's *Wheatfield with Crows* (1890), Rothko's *Untitled Black and Grey* (1970) or Louise Bourgeois' *Maman* (1990). The visual arts are also linked to mental health from a therapeutic perspective of drawing out one's creative resources to tackle personal issues [1]. This chapter takes neither of these routes to the theme, but looks at how technology and collaboration have facilitated artists to augment new ways of working toward an understanding of mental health through the practice of making artworks.

Artists acknowledge that much of our emotional experience is preverbal or nonverbal and occupies an experiential space that is dream-like and difficult to express through words [2]. Artists explore ways to communicate beyond our logocentric-driven world, often using new technologies, where the self can determine new understandings of reality impacting on mental health. The current funding of projects to explore health-related research through Nesta, Arts Humanities Research Council (AHRC), and the Wellcome Trust are surveyed here to understand the growing interest in 'socially engaged practice,' 'social turn,' and 'new genre public art.' The projects and artworks discussed do not set out to have therapeutic benefit, but the resulting work may act as a catalyst to positively change the perception of the world we live in.

This chapter will also specifically investigate the lessons learned from an ambitious collaborative and cross-disciplinary project that involved the Foundation for Art and Creative Technologies (FACT) working with military veterans (based at BNENC Community Centre in North Everton) and NHS Merseyside (2009) (www.fact.co.uk).

Lastly, the authors will discuss *In-between: Windows Within* a potential AHRC arts and science research project in which they are involved. This research continues the work from 2014 when they were part of the interdisciplinary research team in rural North Wales who completed a pilot study with people attending a mental health outpatient clinic called *In-between-ness:* using art to capture changes to the self during antidepressant treatment. (www.in-between-ness.co.uk). This

chapter will conclude by discussing how an expanded team is now ready to conduct a large-scale study using the method they have developed.

8.2 New Technologies and Funding for the Arts (NESTA, Wellcome, AHRC)

Many contemporary artists have confronted the recent technological revolution 'head on' in their work such as Rachel Maclean the recent nominee to represent Scotland at the Venice Biennial in 2017 and the collaborative artists Lizzie Fitch & Ryan Trecartins. Their eclectic mix of video, sculpture, reality TV, and installations explore human interactions with technology and how these have changed the way we engage with the world and with one another. Trecartins says: '*I love the idea of technology and culture moving faster than the understanding of those mediums by people*' [3]. New technologies have also led to an increase in interdisciplinary collaboration as a common modus operandi for artists. This along with research methodologies challenged through 'practice-based' research [4] means that a growing number of artists are teaming up with scientists or engineers to diversify and scale their projects [5].

Funding bodies in the last five years have awarded grants to numerous artists whose work includes a focus on collaborative practice and who utilize new technologies in their work. Nesta's Digital R&D for the Arts Fund, in partnership with Arts Council Wales and the AHRC has a focus on collaboration between arts or cultural organizations and technology partners to either explore business models or expand audience reach [6]. For example, the Arts Alive Cymru project *Exploring Technology in Remote locations* works with professional artists using mobile phone technology to enable the presentation of artworks in rural communities. The aim is to enhance the lives of young people and vulnerable adults in remote locations with little or no connectivity [7]. The Wellcome Trust has Large and Small Arts Awards to fund artistic projects that enable artists and audiences to explore health research. Many of these awards have included artists working with new technologies to address societal problems including health and well-being with many grants in the field of mental health.

Examples of Wellcome Trust Large Arts Award projects that directly reflect the public's perceptions of mental health in the last five years that also involve visual artists using new technologies include: In 2013, Shona Illingworth's *Time Present,* which researches amnesia and the 'erasure of individual and cultural memory' [8]; in 2015, Lindsey Seers moving image installation exploring virtual reality and schizophrenia [9]; and in 2012, Mark Neville's *Bringing the War Home* that investigated the social impact disorders such as post-traumatic stress disorder (PTSD) amongst British troops returning from war zones [9].

Such projects reflect the growing interest's artists have in their work making a direct contribution to society. This is further evidence for the idea of a 'social turn,'

a phrase first used in 2006 by art historian Claire Bishop to describe artworks that aim to impact on social change [10]. The artist filmmaker, writer, and founder of *Situationism,* Guy Debord (1931–1994), whose work is a critique of capitalist society and the hegemony of governments in the post-war era, was perhaps the founding father of this sort of practice [11]. His key influence was to eliminate the spectator's position through collaboration with audiences and crossing discipline boundaries to activate social change. Jeremy Deller's *We're Here Because We're Here #Wearehere*: the Somme tribute is a good example of this sort of practice. This piece of work was commissioned to commemorate the anniversary of 100 years since the first day of the battle of the Somme on July 1, 1916. On July 1, 2016, more than 1500 men in First World War uniforms descended on public places around the UK. The legacy of this memorial is through the photographs taken by the general public and shared through social network sites [12].

Another recent term used to describe similar practices is 'socially engaged practice' situated in the wider arena of public art as defined by Kwon [13] that describes contemporary art that is collaborative and involves people as the medium or material of the work which is often the result of outreach activities. Art-in-the-public-interest focuses on social issues, political activism, and community collaborations; the work of Ai Weiwei and his critique of the Chinese government being another tangible example in addition to Deller's work. Similarly, the term new genre public art coined by Lacy [14] is also a form of socially engaged practice, for example, Rural Works [15]. Terminology and categorization can obscure meaning. Visual art is a very broad term and arguments over what it is and what it does give it its character and value. Its virtue is in discourse that raises awareness through observations, tackling issues, dealing with expectations, and assumptions through its many different forms. What many artists have in common is working toward the common goal of exploring the world through investigating problems but not necessary resolving them. Artists often end up with more questions than answers. However, framing such questions can lead to greater insights and understanding of the world and its representations.

Perhaps in recognition of this shift in artists practice to a socially engaged interest is the AHRC's 'Connecting Communities' program which states:

> The programme seeks not only to connect research on communities, but to connect communities with research, bringing together community-engaged research across a number of core themes, including community health and wellbeing, community creativity, prosperity and regeneration, community values and participation, sustainable community environments, places and spaces, and community cultures, diversity, cohesion, exclusion, and conflict. [16]

In 2015, Axisweb commissioned research to understand artists in the UK who work beyond the gallery in the UK to help validate artwork which is socially engaged and often exhibited outside the gallery. This research found that many artists are not motivated by the mainstream gallery system choosing nongallery contexts for their work in order to ask '*critical questions about social worlds, rather than to make saleable art objects*' [17].

8.3 Mental Health and the Arts (Wellcome Collection/Oriel Davies Exhibitions)

8.3.1 Mental Health Treatment

The Royal Bethlem Hospital or Bedlam as it was popularly known was constructed in 1247 and reflects wide-ranging developments in mental health treatment; it provides mental health care to this day. The Wellcome Collection curated *Bedlam: the asylum and beyond* as a case study to explore '*changing attitudes toward mental health care and services*' and '*explore how medicine, art, and culture define mental illness, and the big questions it raises about the individual and society*' [18]. This section investigates the work of four contemporary international artists in the exhibition that was shown at the Wellcome Collection, London, from September 2016 to January 2017. The selected multimedia artists are Javier Téllez, Shana Moulton, Mr. X, and Madlove: A Designer Asylum. In addition, Seán Vicary's solo exhibition *Studies in Solastalgia* presented at Oriel Davies Gallery, Newtown, from September to October 2016 is also studied.

The following sections summarize the activities of the four artists who are working both outside and within the gallery system.

8.3.2 Bedlam: The Asylum and Beyond

Weaving through the multiple exhibitions plinths containing a plethora of medical instruments and graphic descriptions of patient's historical experiences at Bedlam, the audience's first encounter of Javier Téllez's surreal film *Calligari and The Sleepwalker* (2008) is through a thick blackout curtain. Entering the minimal darkened space of the artist moving image, viewers experience a creative response influenced from the cult horror film *The Cabinet of Dr. Caligari* (1920). Téllez's witty black and white, silent, hypnotic collaborative film is written and acted by patients at a psychiatric clinic in Berlin. This large-scaled single channel projection that incorporates obscure architectural camera angles, curious costumes, and comical make-up includes people holding framed blackboards containing dialogues in German, with subtitles in English. Mirrors and found objects are utilized when acting out alien characters in fantastical settings to create multiple scenarios that disrupt the role of patient/psychiatrist. This interrupts didactic methods with the intention of engaging the viewers in profound experiences that excellently connect with the exhibition theme. Through films relationship to German expressionism, performance and theater and earlier examples of the Dada and Surrealists plays, Téllez adeptly uses film as a tool for exploring mental health issues through artist moving image.

On exiting Téllez's constructed film space and following the curve of the exhibition wall, past historical documentaries on mental health, visitors to the

exhibition are greeted by Shana Moulton's suspended soft sculptures. Created from felt, the sculptures portrayed human-like traits imaginatively created from a pharmaceutical logo for restless leg syndrome, a drug side effect, affecting numerous mental health patients. Moulton's short ten-minute film displayed on a LCD monitor further depicts the condition with a visual narrative running throughout the video. Here, the audience experiences such imagery as arms appearing and disappearing with objects through holes in a unit behind the artist's head to depictions of the artists' legs adopting an octopus style animation on a bed whilst connected to her body when watching a television advert of the said drug in a 'personalized bedroom.' Although a considerably more literal approach the film was notable from the perspective of our relationship to the media, the persuasion of advertising and afternoon TV within a mental health context.

The quirky artworks of Mr. X were documented in a video piece found on a monitor in the far corner of the gallery. An artist and patient of the Royal Bethlem Hospital in its current location [19], Mr. X makes fabulous vehicles out of cardboard which he drives around the hospital and beyond. Film recordings show him driving his vans and trucks along corridors, entrances, and into the hospital's glass fronted elevator as well as the surrounding area of Bromley including its streets and petrol stations. Similar, to Yayoi Kusama, an artist and patient in a psychiatric unit in Japan, who goes out to work in her studio two hours each day [20] Mr. X is not confined or a prisoner in the hospital.

Madlove: A Designer Asylum sits in a corner of the gallery surrounded by an undulating wall adjacent to Mr. X's video. Unlike critics of the exhibition such as Culture 24 which cite displays of footage, prints, photographs, and written accounts that 'place the visitor on the outside looking in, making it difficult to engage with what patients actually experience' [21]. Madlove: A Designer Asylum puts patients at the heart of their design within a gallery context. Culture 24 confirms this in their description:

> ... most importantly of all, exhibitions like this need to leave visitors with some space to reflect and something positive to take away. In 'Bedlam', this comes in the form of the 'Designer Asylum' – a vibrant, utopian, modern day asylum created from the ideas of over 400 people with experience of the mental health system.

Bedlam: the asylum and beyond received positive and negative critiques [22] regardless whether the reviews were good or bad it is important that this work was exhibited.

8.3.3   Studies in Solastalgia

Seán Vicary's exhibition *Studies in Solastalgia* at Oriel Davies Gallery in Newtown, Wales (2016) was a showcase of different aspects of recent and previously unseen strands to this leading Wales-based artist's work. Vicary, a former painter seduced by multimedia currently works with theories of the uncanny,

rewilding and Genius Loci. His practice intertwines scientific, historic, and geographic activity with personal, autobiographical poetic ideas. Through multilayered, high-crafted animations, and delicate sculptural works imbued with dark ecology, he invites the viewer to explore intensely resonate semifictional landscapes concerned with observation, collection, and devastation. The exhibition title is drawn from the word Solastalgia which Australian philosopher Glenn Albrecht describes as a form of homesickness that one get when one is still at 'home.' Vicary adds to this saying that it is also a feeling that is often 'exacerbated by a sense of powerlessness or lack of control over the unfolding change process' [22].

The selection of two pertinent, short animated films from the collection, *Body of Songs: The Nose* (2015) and *Ascension Ceiling* (2014) are included here.

The *Body of Songs* project, supported by Arts Council England and the Wellcome Trust, brought together major musicians and scientists to create songs inspired by the body's organs. As part of the program, a select number of artist–animators were invited to collaborate with musicians and scientists undertaking their own journey of discovery. Transported by Sam Lee and Llywelyn ap Myrddin's *Nose Song* that Vicary described as a sonic version of the all-consuming experience of smell, he began his film by fusing the song with scientific investigations of olfaction by genetics and smell specialist Dr. Darren Logan from the Wellcome Trust Sanger Institute. Vicary's creative animation film aimed for a visual equivalent of the *Nose Song*. Incorporating poetic landscape suggestive of a fictive/autobiographical subtext drawn from his Mother's early childhood in India and personal experience of coping with his Mother's dementia and subsequent death, Vicary certainly achieved it [23].

Ascension Ceiling, Vicary's earlier animated video projection was inspired by the Baroque painting that explored the godlike perspective of drone operators. It responded to the continued use of local airspace in the testing of military drones based at West Wales Unmanned Aerial Vehicle (UAV) Centre in Aberporth but has a much wider more global perspective too. Utilizing audio testimony from military UAV operators, it questioned observation and complicity by creating a reimagining of the world in its constructed animation.

8.4   Technology, Visual Arts, and Well-being Programs (FACT, Lucy Beech, VIP)

8.4.1   The Foundation for Art and Creative Technology

Since 2012 the Foundation for Art and Creative Technology (FACT) has been developing the Veteran's in Practice (VIP) digital arts project with military veterans, artists, and technologists from Liverpool and further afield to produce creative projects including animations, documentaries, and online projects. VIP is just one

strand of the services that the Liverpool Veterans well-being program provide (other support includes a one-stop shop for housing, finances, and health).

These works will be critiqued alongside the work of Lucy Beech's whose new film *Pharmakon* was commissioned for the Liverpool Biennial, 2016, and the Liverpool Veterans well-being program, specifically, the VIP project FACT will be explored. Beech's *Pharmakon* was an interpersonal drama that explored how disease operates in an era of mass communication and was screened at FACT. In 2015, VIP won The Royal Society for Public Health, Arts in Health Special Commendation for the excellence of its contribution to arts and health.

8.4.2   VIP

Polish artist Krzysztof Wodiczko is renowned internationally for his large-scale slides and video projections on architectural facades and monuments. In addition and central to his work are complex designs for personal communication instruments and survival vehicles that explore recurrent themes of social and political marginalization. Wodiczko is currently Professor in Residence of Art and the Public Domain, at Harvard Graduate School of Design (GSD), and prior to this, he was Director of the Interrogative Design Group at the Massachusetts Institute of Technology (MIT) where from 1991 he was a Professor in the Visual Arts Program. His practice, known as 'Interrogative Design,' combines art and technology as a critical design practice in order to highlight marginal social communities and add legitimacy to cultural issues that are often given little design attention [24]. His experience as a visiting professor in the Psychology Department at the Warsaw School of Social Psychology enables him to understand behavior in communities and to help 'develop their shattered abilities to communicate' and share their experiences with others [25].

Wodiczko was initially commissioned by FACT to collaborate on the VIP project in the same year his video installation *Guests* (2009) was exhibited as part of the Polish Pavilion of the 53rd Venice Biennial. *Guests* exhibited in albeit a smaller scale at FACT, but with as much connotation, formed part of a retrospective of four decades of Wodiczko's work in 2016. The installation created the illusion of windows, with scenes unfolding seemingly outside of the gallery. 'Legal' and 'illegal' immigrants residing in Italy and Poland were depicted washing windows, sweeping leaves, and being overheard discussing issues of naturalization. This visualization is of huge significance given the current global situation.

In 2009 and 2015, Wodiczko created two extraordinary artworks in collaboration with the war veterans and Veterans in Practice program at FACT. The initial commission continued Wodiczko's interest in returning soldiers from recent war zones and resulted in *War Veteran Vehicle* (2009). Here, Wodiczko transformed a decommissioned military jeep into a 'mobile video projection vehicle' screening text onto buildings and monuments around Liverpool offering moving testimonials from veterans and their families. The intention was to promote the better

understanding of the 'impact of social reintegration of soldiers' on returning to peaceful societies [26]. For Wodiczko's second commission in 2015, he developed *War Veteran Helmet* in collaboration with FACT's VIP program. Collectively, they discussed the idea of a virtual reality (VR) wearable device for ex-soldiers and developed a prototype helmet that was initially tested in Poland with war veterans.

> *The War Veteran Helmet proposes a techno-cultural prosthesis that can be worn by veterans to better communicate their experience of trauma. It supports them to be present in crowded environments whilst helping the public emphasise with the challenges they face as civilians returning to civilian life.* [26]

Through a series of experimental prototyping workshops at FACT with artists and technologists, the VIP group is continuing to develop the *War Veteran Helmet.* This time the focus has transferred from individual protection with designs and content for the helmet being created and tested with people in public places such as shopping centers in Liverpool. The aim being to educate the public to 'encourage greater understandings of the realities of contemporary conflict' [26] such as those experienced in Iraq, Iran, and currently in Syria.

8.4.3 Pharmakon

Lucy Beech's film *Pharmakon* was screened in the upper gallery at FACT which coincided and complimented Wodiczko's retrospective on the ground floor exhibition space. Beech's lives in London, UK, and her video and performance works explore ideas around 'emotional capitalism, interrogating forms of emotional labor that place a premium on interpersonal interaction whilst blurring the boundaries between work and play' [27]. Her arts practice is often focused on female group dynamics and uses choreography to disrupt narrative structure in order to explore public intimacy and competitive vulnerability. Beech researched for *Pharmakon* by actively engaging with therapy groups, advocacy Web sites, patient forums, alongside interviewing clinicians working within the field of delusional infestation. By focussing on female group dynamics, Beech examines how 'support networks can care for the individual whilst conversely intensifying symptoms' thereby critiquing how 'connectivity in this context can be both illness and remedy and how diagnosis is dependent on our ability to impose particular narratives on the body' [27].

Alongside the film like Wodiczko, Beech incorporated text, using diagnosis as a collaborative exchange between clinician and patient by inviting writers Alice Hattrick and Naomi Pearce to correspond via email about the film as a way to mirror the dynamic. To structure this, Beech gave the writers a two-week timeframe in which to write and edit the correspondence. This references their earlier collaboration *Under the Influence* in association with Womens Art Library, London (2015) [27].

Beeches *Pharmakon*'s engages with marginal communities that seek support via online networks. The focus of which is the fictitious 'Healing Grapevine' which provides care and conversely intensifies its users symptoms. Beech notes:

> *Here connectivity is perhaps poison and cure. These support groups are stereotyped as women who collaborate in their sickness through a shared discourse.* [28]

The film's interpersonal drama was shot in Liverpool in spaces such as the Palm House and a night club in the city center. It wove an imaginary science fiction experience with gritty realism in a cross-disciplinary artistic documentary to explore how health anxiety and self-diagnosis operates currently in an era of mass communication. The use of cinematography through soft tonal colors and depth of field when capturing the narrative of the fictitious therapist and the side profile and panning shots exposing the close up of the main protagonist the female bouncer to emphasis her anxieties were wonderfully implemented. Dialogues such as 'behavior breeds behavior' and visual imagery of the mirroring of several cleaning women's hands on reflective tables were adeptly captured in phrases such as 'not sensing surface but sensing itself.' The connection between diseases such as delusional infestation (DI) and obsessive-compulsive disorder (OCD) and the therapists' voice citing 'contact or noncontact' was clear. Later this 'scientific' communication was emphasized with a larger group of women at a presentation as the protagonist slowly drinks bottled water whilst the pitched declaration that the liquid 'rebalances internal bioterrain' resonates. The continual contrast between the character and the other is emphasized when with her short shaved head and in her security guard uniform, we encounter a recorded monologue of the 'therapist' that is internally rattling through the protagonist's head via her earphones. Here, the female bouncer observes women in sports attire performing meditative yoga moves on a communal floor and from an aerial perspective in her role as 'protector' and 'voyeur.'

FACT are 'ahead of the game' in having the imagination to commission inspirational contemporary artists and technologists who are current and innovative. These exhibitions were most certainly the highlight of the 2016 Liverpool Biennial.

8.5   Arts/Science Collaborations: Lessons Learned (In-Between-Ness: Windows Within)

8.5.1   *Publicity, Accessibility, and Increasing Public Awareness*

Many art/science collaborations since the turn of the millennium have focussed on the contextualizing science through making its language more accessible to the public via exhibition's performances, festivals, and events that have attracted audiences and hence funding. Professor Mark Lythgoe founder and Director of the UCL Centre for Advanced Biomedical Imaging has been combining science and art to engage the public in the UK since the early 1990s [29].

In 2006, Professor Mark Lythgoe (UCL), Dr. R. Beau Lotto (UCL Institute of Ophthalmology), and Dr. Mark Miodownick (Kings College London) were the first scientists to create an exhibition at the Hayward Gallery, London [30]. The exhibition *AfterImage* investigated the human perception of light and color through the work of Dan Flavin and was attend by an estimated 120,000 people [31].

8.5.2   *The Challenge of the Project*

Heald and Liggett are interested in art–science collaborations not just as a means of contributing to public understandings of science but as more of a means of interrogating knowledge production. Their aims as artists are to develop a common language, to take creative risks, and to cross-discipline boundaries. Developing this common language was a lengthy process in the arts/science research project *In-between-ness* [32] and the team met for an hour on a monthly basis for three years to reach a common understanding that enabled them to write a convincing research proposal. Working beyond their comfort zones was the most salient risk to the collaboration, and it was only through ongoing dialogue that assumptions were challenged and a common language emerged. Having a committed, patient, and open-minded team with mutual respect for each other was also essential to the success of their research.

8.5.3   *Relationship with the National Health Service*

The complexities of working within the National Health Service (NHS) had its own challenges; some anticipated and others not. The coordination of participants, medical professionals, and artists in a large rural hospital in North Wales was at times logistically frustrating, but the biggest hurdle encountered was seeking ethical approval. It was a testament to the strength of the team that they managed to get the use of video cameras in a mental health project agreed; provided no imagery of people were included. Participants in the projects faced the same possible misconceptions about the nature and purpose of the research, so a representative was elected onto the team to act a voice for participants. This made them equal partners and had a positive empowering effect on their esteem and sense of personal agency which could perhaps help contribute to recovery from a depressive illness.

8.5.4   *Extending the Measurements*

The research team is ambitious to test the findings from this pilot project and is working on a large funding bid from the AHRC. The team has expanded to include

Fig. 8.1 Paper Interior, video performance (Heald and Liggett 2013) (reproduced by permission)

a general practitioner and three university professors from Bangor and Liverpool in the fields of social science and mental health. If successful, the project will employ a team of artist–researchers in collaboration with FACT to conduct a large-scale study using the method developed from the *In-between-ness* project to impact collaborative research in the field of mental health and the visual arts (Figs. 8.1 and 8.2).

8.6   Discussion

8.6.1   *The Potential of Visual Images*

The potential for using visual images to improve the mental health of patients appears to confirm the value of conducting further investigations with the intention of expanding the range of investigations and validating the initial results across a wider range of patients. In addition, given that mental health and social care are currently an underfunded area of healthcare in the UK, any benefits that can be provided can be crucial to patient health both now and in the future.

Fig. 8.2 Paper Interior, video performance (Heald and Liggett 2013) (reproduced by permission)

8.6.2   Applicability

This raises the question of whether there are any further groups in society currently at the margins that could be helped by similar forms of visual treatment. People with health issues can feel frustrated because often the solution to their problem are labor intensive and expensive, possibly delaying treatment. The arts have had a positive impact upon health issues, particularly within the fields of mental health, dementia, and physical recovery. Engagement in the arts can be life-changing and essential for the well-being of a nation.

8.6.3   Efficacy

It is therefore important in the trials that are conducted with mental health patients to understand how, and in what ways, the use of visual images affect processes in mental health, in the thinking processes, the perspectives with which people view the external world, and in the brain as a whole. Do the visual images change brain chemistry, a change in brain thinking processes, or a combination of the two? Do they affect emotional intelligence? How can digital video art be used to express perceptions of self and the world during treatment for depression?

8.6.4 Treatment Strategies

It is also important to evaluate how far treatment strategies could be put online—to allow direct access by those interested and to reduce the current labor-intensive nature of the interaction of those with mental health problems through addressing well-being. The move to online solutions can be successful in addressing the labor-intensive nature of some treatments and maybe the long waiting lists for an initial consultation. However, there is significant scope for developing preventative strategies, possibly online that can demonstrate the economic value with the social return on investment (SROI) as an indicator.

8.6.5 Automation

Can a model be constructed with key characteristics that can be measured? Can these characteristics be measured automatically and be used as a proxy for the condition of the person? If so, can a digital camera be used to record the data? Can an intelligent database be constructed where the characteristics are mapped onto the model and conclusions drawn? This research raises such questions, that although outside the remit of the project, are worthy of discussion to drive innovation in utilizing digital media to address societal problems.

8.7 Conclusions

Today thanks in part to Martin Heidegger's (1889–1976) notion of 'praxical knowledge' or the 'material basis' of knowledge, '*provides a philosophical framework for understanding the acquisition of human knowledge as emergen*t.' He said that 'praxical knowledge implies that ideas and theory are ultimately the results of practice rather than vice versa' [33]. Collaborative research teams that cross-discipline boundaries nowadays recognize what they can offer each other in the pursuit of knowledge, such as artists finding creative uses for the new technologies through the notion of 'play' and 'experimentation' rather than goal-orientated endeavors.

But still, creativity with its fuzziness and subjective emergent themes and tacit knowledge can at times be at variance with traditional scientific thinking. Goethe's book on color published in 1810 that influenced many artists including Kandinsky was initially rejected by physicists because it was not concerned with the analytical aspects of color but with the phenomena of the perception of color [34, 35]. Artists and scientists working together acquire skills and tools with which to reflect on new perspectives within their work. In the *In-between-ness*, project the artists-enabled new technologies such as high-definition video cameras to be used as research tools

in ways that perhaps the medical professionals would have considered unchartered experience beyond their practice. Typically, the use of new technologies within art practice is to explore problems rather than to solve them in a context that is never commercially driven, as perhaps is the case in the film industry. Visual artists are increasingly pushing the boundaries to incorporate less traditional aspects to their work. They are incorporating new technologies, collaborating with software engineers, scientists, and inventors to produce work that is often less static and more ubiquitous. This can result in greater reach and impact in areas previously unexplored by artists such as within mental health that was not possible before the digital revolution.

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