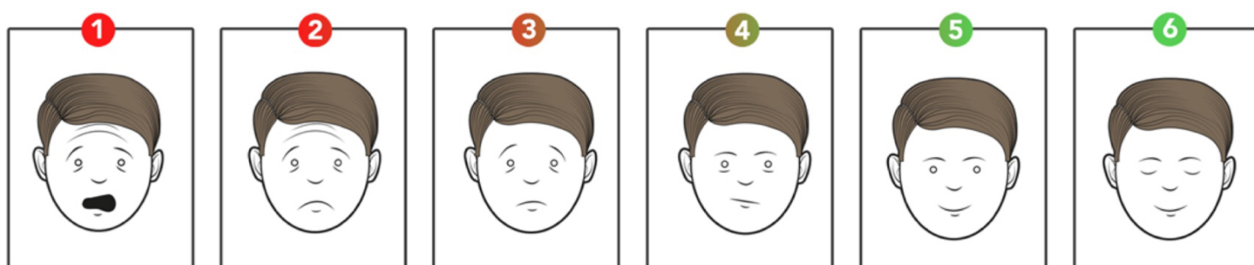
A case for a visual graphic toolkit of therapy worksheets and booklets



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May 2018

INTRODUCTION

Mental health services have always struggled to meet the needs of the population. In the NHS they have frequently been referred to as the 'Cinderella service', receiving less funding than other areas. Recent political rhetoric has promised 'parity of esteem' (Health and Social Care Act 2012), but many services still report lower levels of funding for frontline staff than other NHS services (NHS Providers, 2016), and meanwhile demands continue to increase.

This is particularly felt in IAPT services where national service targets (for the percentage of the population services are expected to treat, waiting times for treatment and recovery rates) continue to increase (NHS England, 2014; NHS England 2015; The Mental Health Taskforce, 2016) while resources remain limited and services that fail to meet targets face potentially serious consequences.

One particular issue for IAPT services is the ability to meet the needs of populations that are traditionally hard to engage. While innovative practice exists, frequently this can be time consuming and expensive for services' stretched budgets.

In 2015-2016 there were 1,300,088 referrals into IAPT services and 537,131 people completed treatment. Nearly half of all completed treatments (47.5%) are likely to have been based around CBT and over 100,000 people had some form of guided self-help recorded as their last treatment type. (NHS Digital, 2016)

A 2015 census showed that 77.4% of the IAPT workforce deliver predominantly CBT based treatments, or are training to deliver CBT based treatments (NHS England and Health Education England, 2015.

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THE PROBLEM

The traditional delivery of CBT involves clients reading psychoeducational materials and keeping diaries. This is especially true at the 'Step 2' level where people are supported in engaging in 'self-help' materials.

However, some people find it difficult to engage in written CBT materials for various reasons including:

- Not speaking English as their 1st language
- Dyslexia
- Low literacy levels (due to education, learning disabilities or other reasons)

English as a foreign language

At the 2011 census, around 8% of the population are reported to have a main language other than English and around 2% could not speak English well or at all. This varies nationally and in some regions the rates of not speaking English well or at all is as high as 8 or 9% (ONS, 2015).

Dyslexia

10% of the population are dyslexic, and 4% of the population are severely dyslexic (British Dyslexia Association).

Literacy levels

While less than 1% of the population is considered completely illiterate, approximately 16% of the population of the UK would be described as 'functionally illiterate' (i.e. unable to pass an English GCSE), and 5% of the population are estimated to have a level of literacy below what the national curriculum expects of an 11 year-old (National Literacy Trust, 2017).

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Estimating from these national averages, we would expect that approximately 104,007 people referred into IAPT services in 2015-2016 will have a main language other than English, 26,002 will not speak English at all, 130,009 will be dyslexic and 52,004 will be severely dyslexic, 208,014 will be functionally illiterate and 65,004 will have literacy levels below what is expected of an 11 year old.

These estimated numbers provide some idea of the scale of the problem; however, other factors may confound these calculations, leading to underestimation of the scale of the problem. Many individuals may not have been referred to IAPT services because referrers or the clients may be aware of these potential barriers to treatment. Moreover, prevalence rates of mental health difficulties may be higher in populations with lower literacy levels for a variety of reasons, for example, it could also be hypothesised that stresses caused by literacy difficulties could increase the likelihood of people developing mental health difficulties such as anxiety and depression.

People from lower socioeconomic groups have higher rates of mental health problems (WHO 2014) and there is a correlation between educational level and socioeconomic status (American Psychological Association). Higher rates of mental health problems have been found to be more prominent in populations who are seeking asylum in the UK as they have fled war, persecution and other circumstances (Mental Health Foundation 2016).

Data exist showing that people who do not speak English well are more likely to be in poor physical health (ONS, 2015) and the same is likely to be true for their mental health.

Therefore, with potentially over 100,000 annually people referred to IAPT services who would have some degree of difficulty engaging with the dominant form of treatment offered, it is likely many of these people will have dropped out of treatment, or failed to reach recovery.

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CURRENT WORKAROUNDS

Translated Materials

Some translated materials exist, however these are largely brief psychoeducational materials, not treatment manuals. Also, the range of languages covered is not extensive. It can be possible to find translations into the languages most commonly used in the UK outside of English (e.g. Polish or Urdu), but it can be difficult to find translated materials for other languages. Even for common languages like Spanish it is difficult to find materials beyond basic psychoeducational materials (e.g. UEA translated questionnaires, Royal College of Psychiatry psychoeducational materials, London Health Programmes translated IAPT materials). Even where materials do exist, it is difficult for therapists to evaluate the quality of materials if they do not have an accompanying English translation.

Audio/video versions

Some very good audio and video resources exist, including some developed by the NHS. However, these rarely contain a whole course of treatment, and using video or audio versions rather than print affects how an individual interacts with material. With printed materials it is easier for individuals to control the pace at which they engage with it, allowing them to easily re-reading particular sections if necessary or skip material that is less relevant for them. These factors may be particularly pertinent for people with anxiety or depression for whom concentration and attention difficulties are common symptoms.

Adapting therapy materials can take up time for both the therapist and in some cases the client. These adaptations may impact on the quality of the treatment received by the client, and there is a cost to the service in lost worktime as clinicians try to source or adapt materials.

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ANOTHER TOOL TO HELP WITH THIS PROBLEM

CBT involves a lot of behavioural interventions (the “B” in CBT). It is possible to illustrate these behavioural interventions (and some cognitive interventions) without the use of text to convey the information. This would allow these behavioural interventions to become accessible to people who have difficulty engaging in conventional text-based booklets and worksheets.

This could be especially useful for clinicians who work at the step 2 level, as many of the interventions used at step 2 are behavioural. It would provide the clinicians with one universal source of materials they could use with anybody who has difficulty engaging with conventional text-based booklets and worksheets, saving time looking for materials or adapting existing materials and interventions.

It is known that people do not exclusively think in words, with mental imagery playing a role in cognition (e.g. Kosslyn et al, 2001). Workbooks will often refer to mental images or ask people to draw thoughts that they have. This is a predominant feature in some common mental health disorders such as OCD where people will often complain of intrusive images, and social anxiety disorder where people may have mental images of how they appear to others (e.g. Hirsch & Holmes, 2007). In these situations, using a treatment that directly uses images may have additional benefits.

Created by a clinician who works within IAPT and delivers CBT based interventions, it would be in line with current interventions used widely in England and would be easy for the majority of the workforce to use without any training or additional information required.

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WHAT WOULD SUCH A PRODUCT LOOK LIKE?

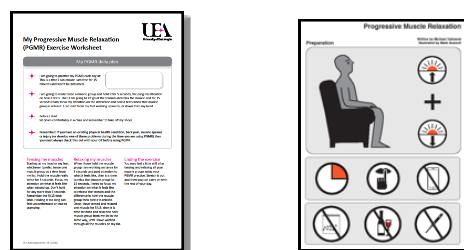
Therapists working in IAPT services typically print or photocopy A4 sheets of paper, and this is how the product should be designed to be used initially. The sheets would be available for downloading and printing online.

This product would use as few words as possible, and wherever possible it would be wordless. By limiting the use of text, any translations that are needed would be easier, and any reading requirements for people with limited literacy would also be reduced.

The overall aesthetic should be acceptable to people who use these resources. An “instruction manual” or “infographic” style would be most likely to achieve these. For example, the safety cards used in aeroplanes, and the instruction manuals used to assemble flat packed furniture can convey a lot of information, are easily understood, and acceptable to most people.

For example, compare a typical worksheet used in IAPT services to describe Progressive Muscle Relaxation with the “graphic” version produced for this project:

Fig 1: Comparisons of PGMR worksheets



The worksheets and booklets would be used in therapy sessions with a therapist to discuss them and explain what the images refer to, and the booklets and worksheets would serve as a reminder of key points outside of sessions. A companion text booklet could also be available so the client can ask someone else (e.g. a friend or relative) to explain particular points.

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HOW DOES IT COMPARE TO OTHER EXISTING PRODUCTS AND CURRENT GUIDELINES AND REQUIREMENTS OF MATERIALS USED IN IAPT?

Extensive research has not found anything like the product described above. The closest is a book called Visual CBT (Joseph, Chapman and Watkinson, 2013), but the images do not meet aesthetic standards, and the content does not match protocols currently used in IAPT interventions.

Fig 2: Sample images from Visual CBT

While there are many outstanding graphic novels, comics and webcomics that discuss mental health issues, these are usually autobiographical or fictional narratives that cover the subjective experience of having a mental health problem. There is none that acts as a “how to” or “instruction manual” for protocols currently used in IAPT services.

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OTHER POTENTIAL BENEFITS

More tools to engage patients

While research in this area is limited, it appears that the brain interprets visual information differently to the way it interprets text-based information, and having an alternative method of engaging people in treatment may help to reach people who are having difficulty with CBT and would provide therapists with another tool for them to use.

Improved learning from using mixed modalities

Studies have found that when people read text they activate auditory areas in the brain (Perrone-Bertolotti, et al., 2012). When reading a visual narrative it is plausible that the visual parts of the brain would be active, and when text and images are combined (for example as they are in comics and graphic novels), both areas of the brain are likely to be active.

A recent study at Sheffield Hallam University found that when undergraduate students were presented with information on biopsychology in a comic format (combining text and images) they performed significantly higher in memory scores when they were tested compared to participants who were given the same information in a text only format. The authors say that this finding supports the use of comic books to create educational materials (Aleixo & Sumner, 2016). Given that CBT is a learning model, the use of materials that optimise that learning process should be a priority.

A format closer to the client's experience

We know that people do not think exclusively in an internal monologue, and many common mental health problems include the individual having intrusive or problematic images in their mind. For example, people with OCD will frequently report having intrusive images which they find distressing, and people with Social Phobia

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describe having an image in their mind of how they appear to others. By using images instead of (or as well as) words in the treatment of these problems, a viewpoint more in keeping with the reader's experience may be created, which would help them to identify with the materials. If "thought bubbles" are incorporated, a representation can be developed that includes internal thoughts and states in relation to external environment and stimuli, producing a more holistic view from the client's perspective. In this way it is possible that the treatment could have additional benefits that text-based treatment manuals and workbooks do not have.

Easier for clients to engage with

Another potential benefit is that the visual narrative may carry less of a cognitive load than text, and in some cases may be more appealing than text. There has been little research into this topic, but I am sure that most people (especially CBT therapists) can think of examples where a simple diagram is easier to understand and engage with than the same process explained purely through text, showing that visual representations can make ideas easier to grasp than relying on text. With clients who are experiencing concentration difficulties due to their mental health problems, this could greatly improve engagement.

At every stage from referral to completion of treatment, people drop out of the IAPT system. Having another tool available to therapists in another format may help to engage some of those people who otherwise may not finish treatment.

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POTENTIAL LIMITATIONS AND DIFFICULTIES

Illustrating internal cognitive processes

One of the most likely barriers is that psychological therapy involves tackling internal cognitive processes, and illustrating this could be problematic. Techniques such as Cognitive Restructuring would present some difficulties when translating into a visual graphic format, but research has shown that behavioural approaches such as Behavioural Activation are as effective for the treatment of depression, and for a large proportion of people behavioural approaches would be sufficient. For those times when it is necessary to convey cognitive processes, with some imagination and a knowledgeable artist or designer, it should be possible to illustrate those processes.

If it is not possible, then there may be times when a small amount of text is necessary, but by keeping this minimal and simple it would make translation easy (even with tools like Google Translate) and would minimise the amount of reading required by people with other difficulties such as dyslexia or low levels of literacy.

Even if it is not possible to develop materials for every intervention for every disorder, this does not mean that they should not be developed at all.

Diaries

Another potential difficulty would be in the use of diaries during treatment. Most courses of treatment in CBT require the client to keep some form of diary (panic diary, thought diary, worry diary etc.) where they can record their experiences, and these diaries are then used in treatment sessions. This is an integral part of many courses of treatment. With people with low literacy levels this presents some difficulties.

Existing work-arounds exist for clinicians presented with this problem. If clients are not fluent in English then they can complete diaries in their native language, and dictaphones (or voice-memo

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functions on smartphones) are frequently used by clients who are unable to write in diaries for other reasons. These solutions could still be used, however in many cases it may be possible for diaries to be converted to a form that relies on icons, pictograms or other ideograms that allow the client to convey their experiences.

Cultural differences

In some cultures there is a different "language" in the tradition of reading comics, and this may affect the readability of these workbooks. Some languages read right to left, and notably Japanese Manga developed separate to western comics and developed their own ways of expressing things. For example, compare the western and Japanese emojis that represent sleep:

Fig 3: Western and Japanese emojis for sleep

When Japanese Manga had a rise in popularity in the west, the pages were frequently "flipped" to be a mirror image of the original. While this was not perfect, most readers considered it acceptable. With the other language differences, it is hoped that people from other cultures living in the UK who are very familiar with their native comic "language" would also have been exposed to western comics and would also be familiar with this. If there is a persistent issue with this when the product is "in the field", it could then be decided whether a specially translated version is required. The minimal amount of text would mean that this was cheaper and faster than for more text-based material.

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POSSIBLE FURTHER EXPANSIONS

With additional time and funding the project could be expanded further. Here are some examples.

Digital

The workbooks could easily be made available online and could be read on a tablet or smartphone. It may also be possible to create a more interactive ’hypercomic�much where different aspects of treatment are linked throughout the comics. For example, when describing the symptoms of muscle tension associated with Generalised Anxiety Disorder, the reader could click/tap on that panel and then be brought to the Progressive Muscle Relaxation worksheets.

It may also be possible to create alternative avatars of the protagonist. This could allow for versions of workbooks where the gender, hair length and colour and skin tone can all be tailored to individual clients. This would allow the client to project themselves into the narrative of the booklet, and it may help to improve cultural acceptability.

Comic

Given some emerging evidence of the benefits to learning from using multimodal formats outlined earlier, it would be relatively easy to convert the materials into a comic book which includes text for use with people who do not have a specific literacy difficulty. This may be beneficial if research shows comics to have better results than standard text when used as an educational tool, or just to give clients and therapists more resources that they can use.

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NEXT STEPS

Thanks to funding from Greater Manchester Mental Health NHS Foundation Trust workbooks to address panic attacks (using graded exposure) and insomnia (using sleep hygiene) have been developed and are available for therapists to use with patients.

Workbooks could be developed for other mental health problems, however, further funding is needed to pay for the writing and illustrations.

Additional funding would also allow for expansions of existing (or future) workbooks such as black and white versions for easier photocopying, and versions where the central character has a different skin tone or gender to allow patients to have a workbook with a character easier for them to relate to so they can project themselves into the narrative.

With investment and support this approach could open up treatment and for a range of people who so far have struggled to access the help they deserve.

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