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Barriers Remain: Perceptions and Uses of Comics by Mental Health and Social Care Library Users

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This article is part of a larger study investigating the perceived value of using comics as an information resource in the teaching and training of mental health and social care professionals in a higher education setting.

We surveyed 108 library users at the Tavistock and Portman NHS Foundation Trust, which specialises in mental health and social care and is a centre for both treatment and training. The study showed that most participants believed that comics have a potential role to play in mental health care training, and that challenges remain in getting comics perceived in ways that are not limited by existing prejudices or socio-cultural assumptions.

Amongst other findings, the study found no significant association between the age or gender of participants and their attitudes to comics in an academic context. Participants considered that the most useful application of comics within the mental health and social care domain was their potential use in medical or therapeutic settings with young people. Even when our sample was not dominated by participants who reported reading comics regularly, the study showed that recent experience of reading comics seems to positively influence how comfortable participants feel about using comics for teaching or learning.

Publisher's Note: This article was originally published with an incorrect peer review statement, which said that this article was an internally reviewed editorial. This has now been amended to reflect the fact that this is a piece of research that underwent double blind peer review by two external reviewers.

Introduction

Recent literature provides evidence that a growing number of comics are being published on health-related topics, including aspects of mental health and social care (Williams, 2012; Czerwiec et al., 2015) and that comics are increasingly being used in higher education settings as information resources. However, the actual uptake of mental health related comics within the mental health sector remains untested. It remains necessary to assess the current attitudes towards comics from those working within the mental health domain, in order to better identify challenges and opportunities for their wider adoption within that setting.

Do socio-cultural assumptions, categories and characteristics such as age and gender continue to play a role in the acceptance of comics as legitimate information resources within professional settings? We proceeded from the hypothesis that attitudes towards comics can help define whether comics can be more widely adopted within mental health and social care educational settings, and gaining insights into what those attitudes are could have an impact on the ways that health professionals are trained.

This article, which is part of a wider study examining 'graphic medicine', presents the results of a study exploring the attitudes around comics and their use amongst staff and students at a mental health NHS Trust that has yet to utilise comics in its training programmes. A previously published article and dataset provided observations from interviews with comics creators and distributors (Farthing and Priego, 2016a; 2016b).

The study presented here had the following objectives:

1. To find out if comics were being used by staff and students at the Trust, and if so, how.
2. To discover the attitudes of Trust students and staff towards using comics in teaching and learning.
3. To establish whether socio-cultural assumptions or prejudices are evident in the population surveyed that might affect the adoption of comics in training mental health and social care professionals.

4. To explore areas where comics could potentially make a contribution to training in the context of mental health and social care professionals.

Following a mixed methods approach (Creswell, 2018), we collected and analysed responses from 108 staff and students at The Tavistock and Portman NHS Foundation Trust, seeking to gain insights from the perspective of materials provision at the Trust's main library in the Tavistock Centre in North London, United Kingdom. The Trust specialises in mental health and social care and is a centre for both treatment and training, with around 1,800 students a year undertaking a variety of training, including courses accredited by the Association of Child Psychotherapists, Association of Family Therapists, The British Psychoanalytic Council and British Psychological Society.

The Trust's portfolio of courses includes master's degrees, postgraduate diplomas, clinical doctorates and continuing professional development certificates, but undergraduate courses are not offered. All courses are within the broad domains of psychological therapies and social care, with some specialisation in the fields of psychoanalysis, systemic therapies and forensic psychotherapy.

The Trust's library stocks around 19,000 loan items, including books, newspapers and pamphlets in the fields of 'psychiatry, psychology, psychoanalysis, psychotherapy, family therapy, forensic psychotherapy, educational psychology, clinical psychology, organisational psychology and social work' (Tavistock and Portman NHS Foundation Trust Library, 2019). The library also subscribes to a range of academic and professional journals. The library is currently only open to staff and students at the Trust and as such is purely a clinical and academic centre, with neither the space nor the resources to be used by patients.

While the history and definition of comics is beyond the scope of this article, it is still useful to define the information resources that we considered in our study. We have used the term 'comics' as the plural noun (McCloud, 1993: 9), also adopting Williams' definition of the plural usage to 'refer to both the physical objects and the attendant philosophy and practice surrounding [comic books]' (Williams, 2012: 21). For the purpose of this study we also adopted McCloud's general definition of

comics as 'juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer' (McCloud, 1993: 9).

McCloud's definition expresses accurately the form and function of comics as information resources, and incorporates the devices used to convey information: drawn images in panels with text contained in captions, speech or thought bubbles. It was anticipated that many of the comics referred to would primarily be in the form of printed books, not least because it allowed the introduction of a selection of titles to the library catalogue.

Before rolling out the study the authors spoke to two members of senior Trust library staff in exploratory unstructured interviews. No anecdotal evidence was found of comics being adopted as reading list or coursework material. We then checked the library collection for its existing stock of comics and only one item corresponded with the definition of comics as used by this article: *Couch Fiction: A Graphic Tale of Pyschotherapy* (Perry and Graat, 2010).

As part of this study the authors purchased a collection of mental health related comics, and added it to the library's catalogue to expand the comics on offer at the Trust. These 21 books were combined with the library's copy of *Couch Fiction* and given a separate display on the library's new books shelf in the main library space, with the label 'Comics and graphic novels'. We did this in the hope that some data on loans could be included in this article (see Conclusions below). We did not presume that any of the comics added to the collection would be suitable for use in training at the Trust: these titles were chosen for their content dealing directly or indirectly with issues around mental health or social care.

Research Context
Comics and mental health
In spite of 10 continuous annual editions of the Graphic Medicine conference so far, the most recent taking place in Brighton in July 2019, there is still a paucity of empirical studies into whether comics are actually being used in libraries and educational institutions within the domain of health care, social care and their subdomains. Similarly, at least from the arts and humanities or comics studies

disciplinary focus, there is a need to contribute evidence from user-centred studies surveying professional communities in regards to their attitudes towards comics and their use in specific domains. It is in this domain-specific research space that this article seeks to make a contribution by studying attitudes at a mental health NHS Trust that has yet to utilise comics in its training programmes and find potential uses for them. In order to contextualise our study, we surveyed some selected previous scholarship that remains relevant as background to this study.

In previous work, the authors documented and discussed the history of 'graphic medicine', 'a handy term to denote the role that comics can play in the study and delivery of healthcare' (Green and Myers, 2010: 577; Williams, n.d.). Williams argued in 2012 that, despite the medical humanities movement, 'the medium of comics […] has received little attention from healthcare scholars', and at the time of writing there is still a need, as we have argued, for empirical studies investigating how or why comics are being used in the domain of health care, social care and their subdomains (for more on 'domains', see Hjørland, 2002).

Examples of the psychotherapeutic uses of comics, especially involving children, are neither new nor rare. For instance, in 1941 Bender and Lourie examined three children's neurotic episodes or negative behaviour and concluded that comics can function 'as a means of helping them solve the individual and sociological problems appropriate to their own lives' (Bender and Lourie, 1941: 550). More recently, the powers of comic-book characters, especially superheroes, have been invoked as ways of reaching traumatised children and helping therapists construct narratives for the healing process (Rubin, 2005; Kaplan-Weinger, 2012; Rubin and Livesay, 2006; Taransaud, 2013; Fradkin, 2016). The author of a book on the workings of the Tavistock Clinic itself also supports the therapeutic use of comics because a child can 'enjoy this format, perhaps because the stylised form and the slightly mocking quality seems to tone down any raw emotions which might otherwise be revealed' (Taylor, 1999: 23).

Utilising the mechanics of comics creation rather than any affective or cultural associations, 'Comics Strip Conversations' (Gray, 1994) is a technique that incorporates simple strips to help people with autism and Asperger syndrome understand social interaction (Bock et al., 2001: 310). Applying principles of Theory of Mind (Zunshine,

2011: 114), the use of stick figures and thought bubbles can help 'to attribute thoughts and feelings to others' and 'review situations that have been problematic for the young person' (Ahmed-Husain and Dunsmuir, 2013: 90). Adopting similar techniques, comic strips have been used to examine social-cognition in patients with schizophrenia (Sarfati et al., 1997) and to improve deficits in such abilities (Bechi et al., 2013; Cavallo et al., 2013).

Illness memoirs in comics form, increasingly referred to as 'graphic pathographies' (Green and Myers, 2010: 574; Pickering, 2019), are seen as potential sources of information and communal comfort for sufferers who share similar conditions and 'in a more immediate manner than might be gained from joining a self help group or reading patient information leaflets' (Williams, 2012: 25). The combination of text and graphics gives the narrative inherent 'self-reflexivity' (Williams, 2011: 356), meaning patients can use comics to externalise problems and use the panels as 'a figurative container for potentially overwhelming psychic material, allowing clients to approach the issue with a feeling of control' (McCreight, 2018: 38). Tversky articulates a proposed advantage of the process by stating a drawn depiction functions differently from a photograph in that 'drawings reveal people's conceptions of things, not their perceptions of things' (Tversky, 1999: 94).

Comics as training

Although long-form, stand-alone comic books (alternatively also often referred to, with varying degrees of accuracy, as 'graphic novels') have been the subject of study as literary objects (Tabachnick, 2009), our study focused on seeking evidence of their use as teaching tools. Examples of scholarship with this scope include Humphrey (2014: 76–77), who explored the use of comics for education and instruction by the US government and US military since the 1950s, as well as the World Health Organization's comic about malaria (WHO, 1999).

In the pedagogical field, Bolton-Gary found that comics in teaching helped create 'a positive affective context' in a study of methods on an Introduction to Psychology course in a US university (2012: 391). Bolton-Gary also lists a range of relatively recent educational psychology texts that use strips such as *Calvin and Hobbes*, *Doonesbury*, and *Peanuts* as pictorial adjuncts to convey ideas, claiming they

go beyond affective purposes and 'are also engaging higher level language modalities' (2012: 391). Excerpts of *Peanuts* are also used to illustrate ideas from the work of psychologist Jean Piaget on child development as 'the gang epitomize children at the pre-operational stage of development' (Singer and Revenson, 1996: 4).

A study by Hosler and Boomer (2011) used a comic in the teaching of biology to college non majors and compared it with text-based content. Given the improvement in subject engagement among some students, the authors suggest that 'with regard to student learning, comic book stories lose nothing to traditional textbooks while having the added potential benefit of improving attitudes about biology' (2011: 316). Short, Randolph-Seng and McKenny (2013) conducted a similar comparison of a graphic novel with a traditional textbook for the teaching of business communication to undergraduate students. The authors carried out two complementary studies: the first study noted the affective benefits of increased student motivation and interest, while the second study compared the use of the graphic novel with a traditional textbook and reported evidence of improved levels of verbatim recall of concepts.

Nalu and Bliss (2011) undertook a comparative study of text-based and comics-based learning materials for expert decision making in the US Navy. Results showed that while there was no increase or decrease in levels of performance, 'the view time for comics took less than half of the time that participants took to read the text based media' (Nalu and Bliss 2011: 2127). This leads the authors to speculate that the 'benefit of using comics is that the description of the information through imagery requires less interpretation' (Nalu and Bliss 2011: 2127). The concept of reduced interpretation is echoed in a different context by Vaccarella (2013), who describes a two-hour teaching session with 15 international undergraduate students using medically themed comics. Vaccarella states that 'vivid pictures and condensed texts in graphic pathographies engendered powerful and immediate responses in the students and also helped overcome linguistic issues' (Vaccarella, 2013: 70).

Comics have been linked to the concept of narrative medicine and/or the medical humanities (Green and Myers, 2010; Williams, 2011) because they can provide 'new insights into the personal experience of illness' (Green and Myers, 2010: 574). Williams (2012) has also argued that a potential educational use of graphic pathographies

could be to 'help healthcare workers understand the nature of personal narrative, and hence may lead to a more considerate and enlightened attitude when dealing with the patient's history' (Williams, 2012: 26). Squier (2008) also stated that 'graphic narrative has the capacity to articulate aspects of social experience that escape both the normal realms of medicine and the comforts of canonical literature' (Squier, 2008: 130). While articles such as these discuss the theoretical value of the comics form to healthcare and related fields of study, the advocacy comes from authors who are often comics creators themselves, and there is little in the way of empirical evidence. Furthermore, Wegner warns that this advocacy, which emphasises the visual, might 'reinforce a false understanding of "seeing" as "knowing"' (Wagner 2020: 70).

Despite increasing mainstream acceptance and claims of the utility of comics, the stigma still attached to them as lacking educational or intellectual worth is well-documented in recent literature and cannot be ignored (Aleixo and Norris, 2010: 2). Irwin surveys a wide selection of graphic non-fiction in a variety of genres, although concerns over 'the limits of memory and bias' (2014: 106) lead to the following warning about libraries collecting such works:

> Thus their place in a library can fill three niches: entertainment, information, and as primary sources for study as literature in their own right. They will not typically be suitable for citing as authoritative sources. (Irwin, 2014: 108)

It could be argued that this perception might be greater in the context of psychology and social care education because, in mainstream superhero comics at least, when 'contemporary psychiatric terms or disorders have been used in stories, they have been misapplied to explain villainy' (Bender, Kambam and Pozioz, 2011).

It is perhaps ironic, in retrospect, that it was a psychiatrist, Fredric Wertham, who initiated "a collective paranoia about the dangers of comic book reading" with his 1948 *Saturday Review of Literature* article, "The Comics, Very Funny". Wertham's book *Seduction of the Innocent* (1954) influentially "blamed the reading of comics for juvenile delinquency" to great social and legal effect (Priego, 2014). But negative attitudes towards comics are, sadly, not necessarily a thing of the past. A 2019 report by the Comic Book Legal Defense Fund offers evidence that even though the

incorporation of comics into various educational settings is increasing and faces less resistance, 'persistent issues' remain (CBLDF, 2019: 10), including views that comics are not 'valid literature' (2019: 7).

This literature review has provided an overview of the existing scholarly context, engaging with comics being used in training and psychotherapeutic contexts, and suggests that historic negative perceptions of comics might have inhibited their greater adoption as tools in education and therapy. This background justifies the need for further user-centred and empirical studies.

Methods

The methods employed in this study are best described as mixed (Creswell, 2018), empirical, ethnographic and user-centred. As empirical user studies can be helpful to identify possible use of bibliographic materials – comics in our case – we followed ethnographic (Campbell and Lassiter, 2014) and user-centred (Blandford, Furniss and Makri, 2016) research methods to design a study comprising of two main data collection instruments: an initial survey for general insights and a follow-up questionnaire to focus on the issues and help us identify trends. We sought to test claims found in the literature about attitudes to comics and their perceived usability. We did this by designing a study composing of two data collection stages, the first engaging a larger general sample through a survey, and a second one engaging a smaller, more specialised sample through a questionnaire. We were interested in seeing whether and to what degree the data collected from each component would be concordant or discordant, both between each dataset and in relation to the literature.

Study design

The main components of this study were two data collection instruments: a Library User Survey and a follow-up Student Questionnaire. The objective was to collect qualitative data from a self-selected sample of participants on their attitudes to comics and their potential uses within a mental health setting.

Both data collection instruments were designed to also collect anonymous demographic data on participants' age and gender (through three options), since historically, the critical literature on comics has discussed the role that socio-cultural

assumptions and characteristics such as age and gender have played in the acceptance of comics as a legitimate expression. An influential example here is Eco (1995) [1965]; for a representative recent example, particularly regarding the role of age and gender in attitudes to comics reading, consider Gibson (2015) and the corresponding discussion by Crucifix (2016).

The questionnaire included a matrix of multiple-choice Likert-type items (McLeod, 2008) in order to explore participant students' attitudes to the use of comics in the context of their studies at the Trust. For detailed information on questions and options, see the supplementary data in the Appendix.

Participants

The study focused on collecting data from current Trust staff and students who were enrolled in the academic year 2014–15, most of whom would have been studying part-time alongside working in a related field.

The Library User Survey was promoted on the Trust's Moodle (an online learning platform) to a population of approximately 2,000 registered users, including staff and students. From the body of respondents to the Library User Survey, we recruited a second group of participants who received a follow-up Student Questionnaire in order to more deeply probe attitudes towards comics and views on their potential uses.

Rather than merely looking for insights based on statistical significance (our participant pool was relatively small), we were focused on collecting qualitative data about the participants' attitudes towards comics materials that might also provide qualitative insights about their experience of comics in a specific setting.

Procedure

The first instrument in the study was an online Library User Survey. Prior to this we set up an initial pilot online survey to test it out, and this was piloted among a group of three psychology students outside the Trust, and submitted for ethical approval to senior Trust library colleagues. The survey was also approved by the Trust's Information Governance department to ensure that it was within NHS ethical guidelines for research. The definitive Library User Survey was then promoted on the virtual learning environment Moodle – the survey was voluntary so an incentive prize draw was also used to encourage user responses. The promotional material

described the survey as a 'Library User Survey' and didn't mention comics. The survey also included questions on social media and video use that aren't utilised in this research article.

This Library User Survey was followed by a Student Questionnaire. We focused the questionnaire on the students who had indicated they would be willing to take part in a second piece of research, and were all invited to participate via an email link. The purpose of the student questionnaire was to more thoroughly probe participant comics experiences as well as testing attitudes through a range of multiple-choice questions with rating scales (McLeod, 2008). No incentive or reward was offered for participation to any respondents in this stage of the study.

Data analysis

The mixed data collected was analysed and cross-referenced via standard content and quantitative analysis in order to identify trends or patterns (Oates, 2006: 245; Krippendorff, 2019). Even if the main insights that we sought were mostly qualitative, for robustness and rigour we conducted statistical tests such as chi-square tests, where appropriate (McHugh, 2013), to check for potentially significant associations should further studies with larger pools of participants be conducted in the future. The statistical software SPSS was used to check for statistical significance, with an alpha level of .05 used for all tests. SPSS was also used to conduct reliability checks on matrix data. Full details of the results and tests can be verified in the supplementary data tables in the Appendix.

The Library User Survey
Participants by role

The survey received a total of 113 complete responses; we focused on the 108 responses from the self-selected participants who were involved in education. The majority of responses came from participants who identified themselves as students (84%), while clinicians and tutors made up the next largest groups.

Library users' gender and age

We took into account the complexity of gender as a category and recognise de facto binary gender classifications are problematic to say the least (Spiel et al., 2019: 62). Since the gender question was included in the study in order to test assumptions and

hypotheses in literature based on a binary classification, we included three options (male, female and 'other'). The majority of self-selected participants identified as female (82%), and the age distribution that had the highest percentage of respondents was the 25–34 years range – 28%. See Table 1 in the supplementary data for the full age distribution of the sample.

While the demographic spread of this sample is outside the normal participation rates in UK higher education (Department of Education, 2019), it is not atypical for the Tavistock and Portman Foundation Trust, as shown in a Quality Assurance Agency for Higher Education review for 2015/16, which reports that '81 per cent of students are over the age of 30, and 82 per cent are female' (QAA, 2016: 3).

Library users' comics experience

We found that the majority of participants had not read any comics in the past five years nor read them regularly, but more than half would 'consider using graphic novels, comic books or website comics as study or teaching materials for higher education' (see Table 2).

When it came to having cited a comic in any piece of academic work, only four participants from the sample of 108 stated they had. These respondents had an option to name the comics and the relevant course for which they'd been used, but this information was not supplied.

We found that recent experience of reading comics seems to positively influence how comfortable the participants feel about using comics for teaching or learning. Most participants with recent experience reading comics said they would 'feel comfortable using comics for academic work'. These results were tested with a chi-square test for independence, which indicated a significant association, $p = .011$ (see Table 3).

Influence of reading comic strips or cartoons

While it could have been expected that participants who read comic strips in newspapers and magazines would be more likely to positively view using comics academically, a chi-square test for independence indicated no significant association between them, despite the indication in the figures reported for the responses (see Table 4).

Comics and age

Although comics are sometimes viewed as being more suited to young people (Groensteen, 2009: 10), for this sample of participants a likelihood ratio statistical test (McHugh, 2013: 147) showed age does not seem to have an association with attitudes to the use of comics in an academic context (Table 5).

Comics and gender

As mentioned previously, some literature assumes that gender can affect how people respond to comics (with a positive bias towards comics for those identifying as males). However, a chi-square test for independence for this sample indicated no significant association between gender and attitudes to comics in an academic context, despite the stark difference in the percentages. It appears that participants who identified as male in this sample were more likely to say they would feel comfortable using comics as study or teaching materials. It is worth remembering, though, that the size of the sample identifying as female is decidedly larger (89 identifying as female compared to 18 identifying as male). The percentage who answered 'no' was the same among both gender groups, but the 'don't know' responses were higher among women (see Table 6).

The Student Questionnaire

While it had been hoped to get volunteers from both the student and staff populations in this self-selecting sample, 21 of the 22 volunteers were students, with a single clinician among the group. We decided at this point to focus the second questionnaire on the students, who were all invited to participate via an email link. Of the 21 students contacted, 15 completed the questionnaire.

Students' gender and age

By cross-referencing between the data recorded for each of these self-selected respondents from the first survey, we found that the gender distribution was very close to the first survey. The majority of respondents identified as female (80%), and the more sizeable group of respondents were aged 25–34 (33%). The age distribution was also similar to the library user survey (see Table 1 for library user survey percentages).

Students' comics experience

The participant data collected from the library survey was cross-checked with the data from the questionnaire sample to see if it included a high concentration of participants with comics experience. Again, similar percentages were evident for the library user survey. However, for the question on whether they would feel comfortable using comics for study, the majority of this sample responded 'yes', unlike the sample of students in the original library user survey.

Given that the call for participants in the second stage of research mentioned that the process would be focused on comics, it was more likely to attract people with a positive interest in them. That said, none of these student respondents stated they had read any of the library's comics collection, nor had they reported a greater amount of recent comics experience on the library user survey.

Potential uses of comics

The ranking of the mean responses showed that using comics in a therapeutic setting with children or adolescents was viewed as the most useful application of comics. This is followed by using comics to convey health information to patients (see Table 7 for statements and responses, with mean score).

Looking at the lower end of the ranking table, it is interesting to note the use of comics in therapeutic situations with adults was ranked in third from last place, contrasting with the therapeutic use with children or adolescents which had the highest-ranking mean score. This might suggest that comics' traditional reputation as a medium best suited for young people is a factor. Further down the mean scale is using comics to illustrate complex academic concepts, with three respondents rating this as not useful. At the bottom of the table ranking was practice and improvement of observational skills, which is particularly interesting in that it is a practical skill with a determinedly visual focus.

As revealed in Table 7 in the supplementary data, every one of the suggested uses of comics had more scores in the two higher ratings in the scale than the lower two, so the overall response was positive.

Comics in an academic context

Studying the responses to the positive and negative statements as two separate groupings, we identified general trends in attitudes to comics use. The highest levels of agreement came in response to the positive statement 'Comics can be used to explore serious social issues.' There were also high levels of agreement for the statement 'Combining images and text to convey information helps me remember it.' However, the largest single response to the statement 'Using comics in some parts of my course would make it more interesting or enjoyable' was the neutral option of 'Neither agree or disagree.' We suggest this might reflect that these participants were uncertain about how comics could be used in the specific context of their course, even if they felt positive about the educational use of comics in general (Table 8).

The highest level of neutral responses could be found to the statement 'My tutor would react positively to me using a comic book for an assignment', with the majority selecting 'Neither agree or disagree'. The dominance of the neutral response in this last statement could be interpreted as reflecting uncertainty about the standing of comics as an academic resource either within the Trust, or perhaps in the wider context of higher education (Table 8).

The responses to the negative statements exhibit a general trend for disagreement. The highest level of disagreement was found in the responses to the statement 'It's inappropriate to deliver academic information using comics.' The statement 'I wouldn't want my fellow students to see me reading a comic' solicited similarly high levels.

We also found high levels of disagreement with the statement 'Comics are only meant to be read by children or teenagers'. The largest level of neutral responses were recorded for the statement 'The layout of images in comics can be difficult to follow.' One possible interpretation for this large neutral response could be a lack of recent experience of reading comics, although two respondents who opted for the neutral stance identified themselves as current comics readers, so this is not solely the case. The largest response of agreement came to the statement 'I don't know how to cite or quote a comic book in an academic assignment.' None of the respondents took the neutral position on this (Table 9).

Limitations

Respondents were recruited through self-selection. Heckman states self-selection may create a sample 'that does not accurately describe the true population distribution of characteristics' (2010: 42). We do not claim our findings are definitely representative of attitudes across the population of the Trust. Additionally, we recognise that the students who participated in the Library User Survey who went on to volunteer to participate in the Student Questionnaire self-selected again, possibly making any bias even stronger for this subset of participants.

For the purpose of this study, however, it was valuable to gain insights from users who not only were users of the library but had some kind of interest in or awareness of comics, particularly since it could not be assumed (nor was it desirable) that any participants pooled from the Trust would always already have any prior awareness of comics in order to be able to provide meaningful feedback. Therefore self-selection was mostly unavoidable given the specialised object of study (a relatively niche field such as comics) and the highly specialised domain in question (mental health training).

Any data collected would have been by definition 'subjective', but not in a pejorative sense, as these subjective user views (personal, empirical perceptions) are valid and worth collecting and analysing as coming from such a specific context and domain. It should also be noted that a lack of full demographic data on the actual population of the Trust at the time of the study made it difficult to judge how representative the samples were in terms of age and gender. Furthermore, the large female gender bias that is generally observed at the Tavistock and Portman Trust would not necessarily be reflected at other institutions.

In addition, two of the main elements of the student questionnaire use a rating scale and a matrix of Likert-type items – the latter giving respondents a choice of five responses to a number of statements with a view to testing attitudes (McLeod, 2008). While it is believed that the data collected from this questionnaire has value, the authors are aware that there are some issues with the formulation of the item statements, with the use of double-barreled terms. For example, both 'children' and 'adolescents' are used in the following item: 'To help in a therapeutic situation with children or adolescents'. The item 'To illustrate complex academic concepts and get a

deeper understanding' is similarly formulated with two parts to the statement. Likert (1932: 90) states that double-barreled terms should be broken up as respondents may want 'to react favorably to one part and unfavorably to the other part'.

We conducted reliability checks, with Cronbach's alpha showing the questionnaire had good reliability. Regarding the question on the potential uses of comics with a scale comprising nine items, as the matrix included four positive statements and five negative statements, the five negatively worded items were reverse scored to facilitate analysis. Cronbach's alpha showed the questionnaire to reach good reliability, $\alpha = .770$. However, four items in Table 10 in the supplementary data would improve the alpha if they were deleted.

It should also be noted that no separate evidence was collected to confirm whether comics are actually effective in the uses for which the students were asked to provide a rating.

Discussion

We set out to explore the attitudes towards the use of comics in mental health training within a sample of participants belonging to the well-defined, specialised population of a mental health educational institution. The term 'talking cure', with its inherent focus on words, has become synonymous with various forms of psychotherapy (Launer, 2005: 465), and perhaps the reliance on the verbal rather than the graphic could be seen as a barrier to widespread incorporation of comics in mental health training. Beyond therapeutic uses of comics, it should be recognised that visual materials have long had their place in clinical evaluation in psychological disciplines (Rabin, 1968). Arguably the most famous example is the Rorschach inkblot test (Drayton, 2012), but images were also used as a tool for cognitive measurement as part of the Wechsler Adult Intelligence Scale, which utilised out-of-sequence sets of drawings that were 'not unlike short comic strips found in the daily papers' (Wechsler, 1958: 61). Here it is perhaps unavoidable for comics scholars to note the Rorschach test inspired Alan Moore's and Dave Gibbons' anti-hero from the comic book series *Watchmen* (1986–1987), highlighting the interconnections between the visual test, conversation, graphic narratives and their interpretations (Moore and Gibbons, 1987; see Acknowledgements below).

Family therapists use genograms with their clients to draw relationships and represent the dynamics of a family system (Jolly, Froom, and Rosen, 1980), and a further example can be found in the methods of the psychoanalyst Donald Winnicott and his use of the act of drawing in his 'squiggle game' to help children engage with the analytic process (Winnicott, 1958: 101–117; Diedrich, 2014: 193). Contemporary applications of Winnicott's method have updated it, for example, to incorporate a range of other art materials, such as colour pencils, in addition to the original lead pencil (Eisdell, 2010; **Figure 1**). While we are not suggesting that Winnicott viewed or described the drawings created with the squiggle game during therapeutic encounters as comics, he does state that when showing the illustrations to the parents of child patients 'they are amazed when they see the drawings in sequence' (Winnicott, 1971: 3). As we discussed, it is the concept of images in sequence that defines and gives comics their basic function, as McCloud (1993) argues.

We can compare **Figure 1** with how the Rorschach test is depicted in the first 3 panels from the first page of *Watchmen* #6, "The Abyss Gazes Also" (Moore and
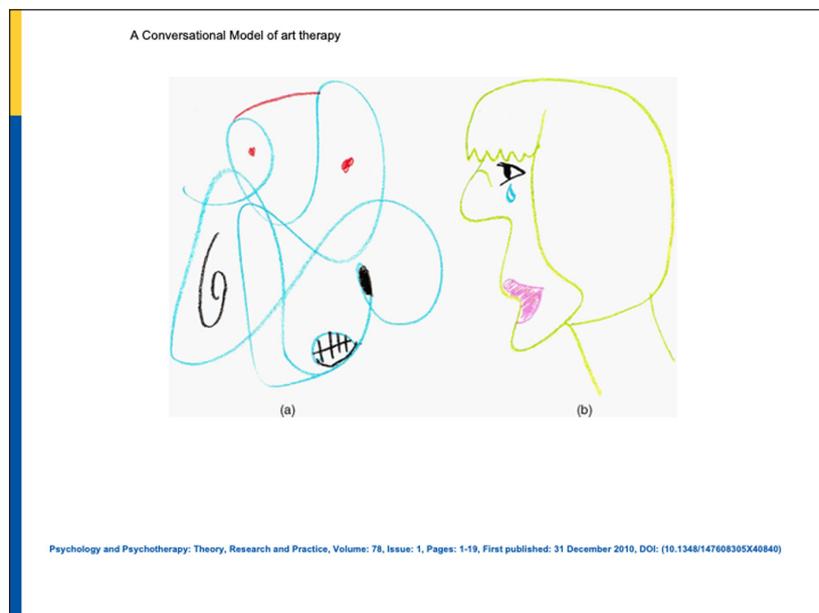

Figure 1: Variation on Winnicott's 'squiggle game': "the start of a 'visual' conversation" between client and therapist (Eisdell, 2010: 8). © The British Psychological Society, cited with permission from John Wiley and Sons and Copyright Clearance Center.

Gibbons, 1987: 1; 1–3). It is interesting how these two completely distinct examples depict a client and therapist relationship in a dialogical and sequential way, even if the meaning of 'sequential' might differ, at least if applied to **Figure 1**. Juxtaposing examples from comics with examples of the 'squiggle game', as shown in **Figure 1**, could highlight the formal, visual interconnections between comics as an established form or medium and therapeutic activities involving drawing. These particular instances can help to emphasise the various ways in which the 'dialogical' – in this case as manifested through conversation or its depiction – graphics, dialogue and sequence are closely interrelated in ways that comics scholarship (e.g. Hudson, 2010) has yet to explore more widely. It is perhaps then not necessarily the utility of graphics that is a barrier to wider acceptance and adoption of comics in this domain, certainly in terms of therapeutic value. However, the widespread adoption of similar mechanics as a pedagogical tool in the training of therapists will most likely first need to overcome comics' association with non-serious material, so that the form's ability to use a semiotic language capable of expressing complex themes and contents can be explored and accepted.

Indeed, evidence of some cultural assumptions or prejudices about comics seemed to be manifest in the results of our study. As demonstrated by the literature review, comics are often viewed in terms of their connection to childhood, both in the wider public and in the areas of interest of many researchers. Given that much of the focus for training and treatment at the Trust focuses on working therapeutically with people aged under 18, it is perhaps no surprise to find this potential link in the data for this project. From the students, this was exemplified in their rating the use of comics in therapeutic work with children or adolescents as the most useful potential function. However, in the student questionnaire, 80% of respondents either disagreed or strongly disagreed with the statement that 'comics are only meant to be read by children and teenagers'. Furthermore, when attitudes to comics were tested across different age groups of the sample in the library user survey, a Likelihood Ratio statistical test showed there was no association between age and feeling comfortable with the use of comics in an academic context. This could suggest that comics are not necessarily bound by perceived cultural associations with childhood or youth.

Given that comics have not traditionally been used at the Trust, it is perhaps unsurprising to find a lack of confidence about using them in the context of the training undertaken there. This is reflected by students in responses to the statement 'I don't know how to cite or quote a comic book in an academic assignment' with 74% either agreeing or strongly agreeing. Another factor might be confusion over issues of copyright and fair use relating to reusing panels from a published comic in academic writing, which might seem less straightforward than quoting and citing a passage of text (Deazley, 2014).

Participants responded positively to the idea that comics could be used therapeutically and also used to convey health information to patients. This has resonance with the concept of bibliotherapy and the use of specific reading material as either assistive to treatment or as a form of self-help (Lehr, 1981). The Reading Well's 'Books on Prescription' scheme is a recent manifestation of this concept and has been supported by NHS England and the Libraries Connected group (The Reading Agency, 2019). It provides a list of evaluated self-help material but the only explicitly visual works on the scheme's 2019 list for mental health (under the 'Personal Stories' section) are *I Had a Black Dog* (2007) and *Living with a Black Dog* (2009) by Matthew Johnstone; these publications are best described as illustrated books as they don't fit the definition of comics as outlined earlier in our study. McNicol (2018) sees graphic medicine as part of the bibliotherapy continuum so it's perhaps disappointing to find nothing included on the latest lists. It also seems worth noting that, in our research, when it came to the idea of autobiographical comics giving insights into the lives of people facing challenges, respondents didn't rate this as highly as other potential uses, even though it's claimed as one of the benefits of the form by the Graphic Medicine community.

Further reflection on the question about potential uses of comics (Table 7) reveals that the four rated most highly by our participants can be related to the wider cultural perceptions of comics as described in the literature review: helping therapeutically with children (age bias); conveying health information to patients or helping to understand a subject when English is not a first language (aid to limited literacy); to provide variety in course materials (affective response). The two lowest rated items from this particular question were illustrating academic

concepts and improving observation skills, which are arguably beyond the stereotypical uses of comics.

The participants in this study were not asked whether they could identify any comics that might be useful to them for their professional work or training, nor were they asked if they were aware of the type of comics that are advocated by graphic medicine scholars and practitioners. Proponents of graphic medicine argue more awareness would lead to greater use of comics material in health treatment and training, and this is corroborated by the results of our research, where we show that respondents with recent experience of reading comics were more likely to see them as being suitable as pedagogical tools.

Increased knowledge of comics might have some impact on how they are viewed as an academic resource in general, but items would still need to prove specific utility for the student population to be adopted as course material. One of the conclusions of our interviews with comics producers and distributors (Farthing and Priego, 2016a) was that, given the variety of material being produced, firmer links should be established between academia and comics authors and publishers so that potentially useful works aren't overlooked. This may also help creators and disseminators provide material that is more suited to the needs of specific domains.

To this end, Lykou gives an example of a graphic narrative being subject to psychoanalytic criticism, with the comics form proving especially suitable because of the 'strong association of visual images with the (Freudian) psyche' (Lykou, 2019: 119). This could prove pertinent for some groups of trainees at the Tavistock and Portman, given its reputation as a centre for the development of psychoanalysis in both treatment and training.

One further potential use of comics could be to give trainee therapists insight into therapeutic practice before they've started treated patients. Two examples are the previously mentioned *Couch Fiction*, which depicts a psychodynamic therapeutic encounter, and *Couple Therapy* (Bloomfield and Radley, 2013), which gives insights into techniques used in the treatment room when working in the field of relationship counselling.

Jacobs (2008) acknowledges that socio-cultural assumptions, prejudices or associations might inform some people's opinions on comics value and their utility,

but also declares: 'it is also imperative to understand that comics are not just the sum total of these associations' (Jacobs, 2008: 61). It is believed that the research at the Trust has revealed some evidence of such associations, but also some insight into their potential uses outside of those associations.

Conclusions and Further Research

One of the key insights from this study is that most participants believed that comics have a potential role to play in mental health care training, and that, as we had expected, challenges and barriers remain in getting comics perceived in ways that are not limited by existing prejudices or socio-cultural assumptions.

It is also insightful that the study found no significant association between the age or gender of participants and their attitudes to comics in an academic context. Moreover, the study showed that participants engaged in mental health training considered that the most useful application of comics within the mental health and social care domain was their potential use in medical or therapeutic settings with young people in particular, which confirms the role of socio-cultural assumptions in current perceptions of comics by non-regular readers. Even when our participant sample, though self-selected, was not dominated by regular comics readers, the study showed that recent experience of reading comics seems to positively influence how comfortable participants feel about using comics for teaching or learning.

The findings of this study demonstrate there is interest in the use of comics in the context of work and training at the Trust, but as we have discussed there is evidence that many stereotypical perceptions of comics are to be found among the sample of Trust students and staff. Assumptions or prejudices that comics are most suited to young people or concerns about comics being appropriate for academic use were revealed through the library users survey and student questionnaire. Even the widely perceived historical gender bias in comics could also be seen in the circulation figures for the library's comics collection, with 47% of loans being taken out by male library members (Table 11), which is disproportionate given that the population of the Trust is overwhelmingly female. However, the survey

and questionnaire also demonstrated that while there was a significant degree of uncertainty, for all direct questions about comics, more positive responses were received than negative responses.

Developing a comics collection as part of the library catalogue was a first step to discovering whether they might have a role at the Trust. Further research needs to be conducted at the Trust to establish exactly how items in the library's comics collection are being used, and whether they are tools for learning or leisure reading, but also at other training institutions for mental health and social care, as the literature review revealed that there is currently a gap in provision here. While the data included in this article demonstrates there is interest in the use of comics in the context of work and training at the Trust, it also shows that socio-cultural barriers remain for their wider adoption, signaling a need for more informed awareness of their deeper utility within this domain. There is also a need for similar research to be conducted at other training centres and educational institutions.

Aggleton (2018) highlights the importance of working definitions of comics for library collections, particularly as they are increasingly created and disseminated through digital means.

Ongoing PhD research co-supervised by one of the authors of this article is building on Aggleton's line of enquiry and the work we have presented here, calling for further understanding on what motivates people to create, read, collect and teach comics and how this informs the individual's behaviour and use of particular technologies (British Library, 2019; Berube, 2019). Further research will involve learning what is important to people in how they choose to create, share, and read comics, as this should help us to understand important factors that should be considered when building library collections. By having focused on student library users, rather than the comics themselves, we hope that this article has offered an initial step in this direction.

Appendix
Supplementary data

In presentation of results, percentages have usually been rounded for clarity, so totals may not always equal 100%.

Table 1: Age distribution by percentage (n = 108).

Age range in years	18–24	25–34	35–44	45–54	55–64	65 or over
Percentage of total sample	2%	28%	22%	24%	18%	6%

Table 2: Experience and attitudes towards comics use (n=108).

	Yes	No	Don't know
Have you read any graphic novels, comic books or website comics for leisure in the past five years?	31%	67%	2%
Do you regularly read any comic strips or cartoons in newspapers or magazines?	31%	69%	–
Would you feel comfortable using graphic novels, comic books or website comics as study or teaching materials for higher education?	46%	29%	25%
Would you consider using graphic novels, comic books or website comics as part of a class or professional presentation?	58%	23%	19%

Table 3: Comparison of responses to the question 'Would you feel comfortable using comics for learning or teaching in higher education?' by comics reading experience.

	Yes	No	Don't know
Respondents who have read a comic in the past 5 years (n = 34)	68%	18%	15%
Respondents who have not read a comic in the past five years (n = 74)	36%	34%	30%

Chi-squared test: X^2 (2, n = 108) = 9.103, p = .011, Cramer's V = .290.

Table 4: Comparison of responses to the question 'Would you feel comfortable using comics for learning or teaching in higher education?' by respondents who read comic strips in newspapers/magazines and those who don't.

	Yes	No	Don't know
Respondents who regularly read comic strips or cartoons in newspapers or magazines (n = 33)	55%	15%	30%
Respondents who regularly read comic strips or cartoons in newspapers or magazines (n = 75)	43%	35%	23%

Chi-square test: X^2 (2, n = 108) = 4.274, p = .118, Cramer's V = .199.

Table 5: Percentage of responses in each age group to the question 'Would you feel comfortable using comics for learning or teaching in higher education?'.

	Yes	No	Don't know
25–34	43%	37%	20%
35–44	46%	21%	33%
45–54	50%	19%	31%
55–64	53%	32%	16%
65 or over	43%	29%	29%

Data set violates assumptions for chi-square test, so Likelihood Ratio is reported: X^2 (8, n = 106) = 4.396, p = .820.

Table 6: Responses by gender to the question 'Would you feel comfortable using comics for learning or teaching in higher education?'.

	Yes	No	Don't know
Female	44%	28%	28%
Male	61%	28%	11%

Chi-square test: X^2 (2, n = 107) = 2.669, p = .263, Cramer's V =.158.

Table 7: Students' scoring of potential uses of comics, in descending order of mean rating (n = 15).

Rating scale 1 = Not useful 5 = Very useful	Score 1	Score 2	Score 3	Score 4	Score 5	Mean rating
To help in a therapeutic situation with children or adolescents	0.00%	0.00%	20.00%	20.00%	60.00%	
	0	0	3	3	9	4.40
To convey health information or advice to patients or clients	13.33%	6.67%	0.00%	26.67%	53.33%	
	2	1	0	4	8	4.00
To understand a subject when English is not your first language	0.00%	13.33%	20.00%	26.67%	40.00%	
	0	2	3	4	6	3.93

(Contd.)

Rating scale 1 = Not useful 5 = Very useful	Score 1	Score 2	Score 3	Score 4	Score 5	Mean rating
To provide variety in the type of course materials used	13.33%	6.67%	20.00%	33.33%	26.67%	
	2	1	3	5	4	3.53
As a quick introduction to topics before deciding whether to explore them further	6.67%	6.67%	46.67%	13.33%	26.67%	
	1	1	7	2	4	3.47
As autobiographies to give insights into the lives of people facing challenges	6.67%	13.33%	33.33%	20.00%	26.67%	
	1	2	5	3	4	3.47
To get a basic understanding of complex topics you're required to study	6.67%	26.67%	26.67%	13.33%	26.67%	
	1	4	4	2	4	3.27
To help in a therapeutic situation with adults	6.67%	26.67%	20.00%	26.67%	20.00%	
	1	4	3	4	3	3.27
To illustrate complex academic concepts and get a deeper understanding	20.00%	13.33%	26.67%	13.33%	26.67%	
	3	2	4	2	4	3.13
To practice and improve observational skills	20.00%	20.00%	20.00%	13.33%	26.67%	
	3	3	3	2	4	3.07

A reliability analysis of the potential uses of comics scale comprising 10 items gives a Cronbach's alpha showing good reliability, α =.936. Most items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. The exception is item 4 ('To provide variety in the type of course materials used'), which would increase the alpha to α = .938.

Table 8: Responses to positive statement Likert-type items on the use of comics (n = 15).

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Combining images and text to convey information helps me remember it	20%	67%	13%	0%	0%
Comics can be used to explore serious social issues	40%	53%	7%	0%	0%
Using comics in some parts of my course would make it more interesting or enjoyable	13%	33%	40%	7%	7%
My tutor would react positively to me using a comic book for an assignment	7%	13%	60%	20%	0%

Table 9: Responses to negative statement Likert-type items on the use of comics (n = 15).

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Comics are only meant to be read by children or teenagers	0%	7%	13%	47%	33%
I wouldn't want my fellow students to see me reading a comic	0%	13%	7%	40%	40%
The layout of images in comics can be difficult to follow	0%	20%	53%	20%	7%
I don't know how to cite or quote a comic book in an academic assignment	27%	47%	0%	13%	13%
It's inappropriate to deliver academic information using comics	0%	7%	7%	47%	40%

A reliability analysis was carried out on the potential uses of comics scale comprising the nine items that are presented in Tables 8 and 9 with the five negatively worded

items reverse scored to facilitate analysis. Cronbach's alpha showed the questionnaire to reach good reliability, α =.770. However, the four items listed in Table 10 would improve the alpha if they were deleted.

Table 10: Items negatively affecting reliability of matrix measuring attitude to comics in an academic context.

Item	Cronbach's alpha if item deleted
Using comics in some parts of my course would make it more interesting and enjoyable	.789
The layout of images in comics can be difficult to follow	.803
My tutor would react positively to me using a comic book for an assignment	.785
I don't know how to cite or quote a comic book in an academic assignment	.781

Table 11: Total loans from library comics collection from 17 October 2014 to 24 December 2014 by gender.

Title	Female	Male
Are You My Mother? by Alison Bechdel	3	0
Billy, Me & You: A Memoir of Grief and Recovery by Nicola Streeten	0	1
Biological Psychology: An illustrated Survival Guide by Paul Aleixo and Murray Baillon	0	1
Couch Fiction: A Graphic Tale of Psychotherapy by Philippa Perry and Junker Graat	2	1
Daddy's Girl by Debbie Drechsler	1	0
Freud by Corrine Maier and Anne Simon	1	1
HOAX Psychosis Blues by Ravi Thornton	0	0
Lighter Than My Shadow by Katie Green	0	1
Look Straight Ahead by Elaine M Will	0	1
Marbles: Mania, Depression, Michelangelo, & Me: a Graphic Memoir by Ellen Forney	0	1
Neurocomic by Hana Ros and Matteo Farinella	0	1
Psychiatric Tales by Darryl Cunningham	1	2
Tangles: A Story About Alzheimer's, my Mother, and Me by Sarah Leavitt	1	0

(Contd.)

Title	Female	Male
The Bad Doctor by Ian Williams	3	0
The Complete Maus by Art Spiegelman	1	1
The Courage to be Me by Nina Burrowes	1	0
Tomboy by Liz Prince	1	0
The Nao of Brown by Glyn Dillon	0	1
The Ride Together by Paul Karasik	0	0
The Wolf Man: Graphic Freud by Richard Appignanesi and Sława Harasymowicz	2	1
Wire Mothers: Harry Harlow and the Science of Love by Jim Ottaviani	0	1
With the Light: Raising an Autistic Child by Keiko Tobe	0	1
TOTAL LOANS	17	15
PERCENTAGE OF TOTAL	**53%**	**47%**

Acknowledgements

Competing Interests

The authors have no competing interests to declare.

Author Contribution

Ernesto Priego and Anthony Farthing contributed equally to this article.

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