Saved by Dissections. The Popularity of Jigsaw Puzzles in Times of Calm and of Crisis. Are Librarians Dissectologists and What Might We Learn from the Bigger Picture?

Abstract: In the 1760s a newly qualified apprentice to the King's Geographer hit upon the idea of cutting up maps for children to assemble as a geographical teaching aid. Dissected maps remain popular to this day in their evolved form as jigsaw puzzles. This article, written by Alison Million during the Covid-19 lockdown when jigsaws have exploded in popularity, looks at their history and at research projects which have established their cognitive benefits or have used them as an inexpensive non-digital tool. By considering papers written on librarians' thinking styles and on personality it seeks to establish with the help of a short survey whether parallels might exist between the cognitive skillsets of the jigsaw puzzler and those of the librarian.

Keywords: librarians; jigsaw puzzles; dissectology; soft skills; Covid-19

SPILSBURY'S DISSECTED MAPS

In eighteenth century London a foot passage named Russell Court ran between Drury Lane and Brydges Street, known today as Catherine Street, but which like a piece lost forever from a jigsaw has today disappeared from the map. Russell Court might conceivably have been one of "Drury's mazy Courts, and dark Abodes" referred to by John Gay in Trivia² in 1716, but some four decades later the passageway was a suitable enough location for a shrewd young engraver and map maker from Worcester to take up premises. For there it was that sometime between 1760 and 1763 John Spilsbury set up Spilsbury's Print Shop after successfully completing his apprenticeship with Thomas Jefferys, a well-known cartographer and geographer to the King. Significantly, Jefferys had also been one of a number of tradesmen seeking to exploit the new market in children's books and games which had proved lucrative since Thomas Boreman, a London bookseller, had commenced a trend in the 1740s by publishing a successful series of books for infants called Gigantick Histories.3

We do not know the exact year when Spilsbury arrived in Russell Court but an entry in Mortimer's Universal Director, a London directory for 1763 reads: "Spilsbury, John. Engraver and Map Dissector in Wood, in order to facilitate the Teaching of Geography. Russelcourt, Drury-Lane.⁴

In that short entry something of the history of the jigsaw puzzle is recounted for it was John Spilsbury who, in the wake of the success of the new juvenile entertainment market to which he had been exposed during his apprenticeship, took a map of England, mounted it onto a thin mahogany board and cut it along the county borders for children to reassemble as a geographical teaching aid. In Spilsbury's "dissected maps" the precursor of the jigsaw puzzle was born.

Spilsbury's Trade Card⁵ shows that he went on to produce dissections of "the eight map subjects most likely to appeal to upper class English parents: the world, the four continents then known (Africa, America, Asia and Europe), England and Wales, Ireland and Scotland".⁶ A sample of one of just two known remaining Spilsbury maps in a British public collection is held by the British Library.⁷

Spilsbury's maps, which contained juxtaposed rather than interlocking pieces, knew continued popularity long after his untimely death⁸ in 1789 aged no more than 30, and one which has endured to this day in their evolved form as jigsaw puzzles. The name "jigsaw puzzle" derives from the treadle jigsaw cutting tool which was invented in the late 19th century.⁹ Other manufacturing as well as social developments across the centuries have transformed early dissections from educational instruments cut from wood and prone to warping¹⁰ to today's high quality factory produced die cut cardboard puzzles displaying vast ranges of creative images for the purposes of

amusement. Wooden jigsaws are still in circulation both via second-hand markets and as new productions. In depth histories of the jigsaw puzzle and its evolution are produced by Hannas¹¹ and by Tyler.¹²

Spilsbury's Print Shop also sold books. The coupling of jigsaws and books is entrenched in history. The 18th century London bookselling rivals William Dalton & John Wallis, for example, also branched out to sell dissections. (Incidentally any relationship between John Spilsbury and his namesake W H Spilsbury (1803–1877) Librarian and Historian of Lincoln's Inn would be an interesting pairing, but that is a subject for future research).

The coupling of jigsaws and books exists to this day in major bookselling outlets. This might arouse some curiosity over the nature of the connection between jigsaws and books, and by extension whether there are any connecting influences between jigsaw puzzles and librarianship even though librarianship, like Spilsbury's dissections, has evolved from its point of origin. Libraries are no longer repositories for books alone and jigsaws are not solely educational maps, yet both share a history of knowledge dissemination; of constructing the bigger picture; of placing pieces from the maze correctly into context. Might we as library and information professionals appreciate them as such, share skillsets with the puzzler or find anything of instruction in the cognitive process? Those are the suggestions which this article sets out to explore after considering the popularity of the jigsaw and its widely documented cognitive benefits. The catalyst for making that exploration in 2020 is the pandemic and lockdown which has dissected our lives and routines; for jigsaws are never more popular than during a crisis.

JIGSAWS ARE POPULAR ESPECIALLY IN TIMES OF CRISIS

Ever since Spilsbury sold his first dissections in Russell Court his invention has remained in popular use. Its modern day successor is a big seller, with sales on the rise. Statista is a German online portal for statistics which produces figures on the UK puzzle market - where however puzzles are defined as: "jigsaw and 3D puzzles, as well as slider puzzles, Rubik's cubes and other brain teasers" - and states that in 2019 the value of manufacturer sales in the UK was approximately £26.1 million. 14 That figure has risen steadily each year since 2013 from £8.96 million. 14 In 2017 John Lewis & Partners reported a 16% increase in jigsaw sales, 15 the same year as the jigsaw was included as a new item in the Consumer Price Index baskets used to calculate inflation. 16

One leading UK jigsaw manufacturer, H P Gibson & Sons Ltd which counts The Queen amongst its customers, ¹⁷ explained in an interview with law firm Farrer & Co in January 2020 how diversification into jigsaw puzzles had proved a very beneficial move when their

board game sales were challenged by the advent of computer games in the 1980s and 90s. ¹⁸ Interestingly, in the interview Kate Gibson also spoke of "taking time away from screens" as a therapeutic benefit of puzzles and games. This proves to be a recurring theme and one which may well resonate with us all. It is perhaps with a hint of irony as well as a credit to the attributes of jigsaw puzzling that the founder of Microsoft and his wife Bill and Melinda Gates are described as "raving fans of jigsaw puzzles" or as we could say "raving dissectologists". The originator of this term is Tom Tyler who founded the Benevolent Confraternity of Dissectologists jigsaw puzzle club in October 1985. ²⁰

In times of crisis jigsaws come into even greater vogue. They enjoyed particular popularity during the 1930s Great Depression when they were an "an inexpensive, reusable amusement". During the recent coronavirus lockdown Andrew Morgan, a research assistant at Glasgow University, spoke of the "many small victories" of clicking jigsaw pieces into place which provides a sense of achievement at a time when people have fewer opportunities to concentrate on normal daily activities. ²²

At the start of the coronavirus lockdown the surge in demand was reported both on manufacturers' websites and in the Press. "Keep Calm and keep Puzzling" declared Wentworth Wooden Puzzles, a Wiltshire company which reported almost a doubling of sales overnight in the second week of March 2020.²³ The major game and toy company Ravensburger reported an increase in jigsaw sales of 370%. "Maybe it's that satisfaction of completing something in an otherwise kind of messy world around you," said their CEO Filip Francke.²⁴ "The nation has gone "bonkers" for jigsaws", said a spokesman for House of Puzzles to Scotland's *The Sunday Post.*²²

Interestingly, some jigsaw puzzle adherents have recorded that during times of difficulty they turn to jigsaws as an alternative to reading. Liz Vater, who founded the Stoke Newington Literary Festival, was going to read all the books she had around the house during lockdown. "I just wasn't able to read. It was horrible. I always have a book on the go. But then I started a jigsaw. It does a similar thing. I was focusing in. It was quite meditative".²⁵

Dame Margaret Drabble, a well-known jigsaw puzzle enthusiast and main contributor to the elite circle of literature on the subject, turned to jigsaws when her husband was seriously ill: "I found I couldn't concentrate on reading, my usual diversion, but a jigsaw kept me occupied and reduced stress".²⁶

Dame Margaret has written about how we can learn from jigsaws through the pictures they convey, just as Spilsbury's juvenile customers did over 250 years ago. Speaking of great works of art, she says "You learn a lot from jigsaws. You can learn about brush strokes and colour palettes and you can memorise the smallest details of vastly complicated and densely populated canvases". ²⁶ In *The Pattern in the Carpet* she explains how a friend tried to learn the names of the French departments through a jigsaw puzzle. ²⁷

Exactly how we might benefit from jigsaws - not only from their pictures but from the cognitive functions employed by the brain - has attracted studies from neuroscientists.

THE COGNITIVE BENEFITS OF JIGSAW PUZZLES

The received wisdom is that jigsaw puzzling is a brain healthy activity as it engages both the left and right side of the brain. The French philosopher Jacques Chevalier (1882–1862) described this in wording which bears an obvious relationship to the subject of this article: "The right (visual) hemisphere works with gestalt (the whole, big-picture concept). The left, auditive, hemisphere takes care of logic (small parts as opposed to the big picture)".²⁸

Experts including Chevalier, however, question whether we can realistically confine as complex an organ as the brain into two separate sides and then pigeonhole tasks into one side or the other. Patrick Fissler, a neurology expert at the University of Ulm in Germany says he doesn't like to think of it that way. "I would not like to talk about right and left brain. Both hemispheres are interacting constantly in many tasks".²⁹ Fissler believes it's important to do jigsaw puzzles for psychological health and explains in a short but colourful video³⁰ how our brains benefit from jigsaw puzzling which activates up to eight different cognitive functions at the same time. He compares jigsaw puzzling to meditation and says, "I think it might probably be better than watching television".³⁰

In 2016 Fissler conducted a project with six other academics at Ulm researching into the prevention of neurocognitive disorders by assessing the beneficial effects of cognitive activities, of which jigsaw puzzling was a good example. The researchers' findings indicated that "jigsaw puzzling recruits multiple visuospatial cognitive abilities and is a – not necessarily causal –protective factor for visuospatial cognitive aging". Visuospatial cognition encompasses skills such as searching for and locating objects, holding items in your visual memory and detecting patterns, among others. 32

As well as recognising the cognitive benefits of jigsaw puzzling the Ulm study acknowledged the jigsaw as being an accessible, inexpensive and - notably - a tech-free device: "Solving jigsaw puzzles is a low-cost, intrinsically motivating, cognitive leisure activity which can be executed alone or with others and without the need to operate a digital device".³³

THE USE OF JIGSAWS IN A RESEARCH PROJECT ON COLLABORATION

Some 13 years prior to the Ulm study, researchers at the University of Bath in 2003 had likewise recognised the jigsaw puzzle as a useful experimental tool. The objective of the Bath study,³⁴ conducted by researchers Hilary

Johnson and Joanne Hyde, was to see how people collaborate to achieve shared goals. "Both the nature of collaboration and research into how people collaborate is complex and multifaceted", they said.³⁴

In this study, two PhD students in Computer Science were observed constructing jigsaws individually and then collaboratively with researchers noting differences in participant approaches between the two situations. The research was performed with a view to aiding the development of computer software that could help people collaborate on work projects.³⁵ Collaboration is defined in the paper as how people communicate explicitly and implicity, how they plan together, monitor each other's actions to give assistance, order actions sequentially where necessary and take turns in sharing resources and tools so that they do not conflict. It also includes how people protect their individual work from interference and change from other group members.³⁶

The participants were observed constructing the same 120 piece jigsaw individually, collaboratively and then a second 120 piece jigsaw collaboratively. The jigsaws incidentally bore images of dinosaurs. The researchers appreciated the jigsaw as a useful experimental tool: "Although jigsaw construction appears to be a simple task, there is still some level of problem-solving, and trial-and-error behavior that might characterize other work tasks and leisure activities".³⁷

At the beginning of the collaborative activity the participants negotiated on how they might approach the task and what they each should do. "You are the boss",38 said A1, but it was A2 who was often obliged to make the bigger shift in his way of working by stretching between Al's arms to get pieces or straining to see the box lid.³⁸ "There is evidence from the first jigsaw that there was not equal access to resources and that one collaborator had much more control of the pieces, box lid, and frame. Conflict was only avoided by the second collaborator creating a separate work space outside the jigsaw frame".39 The researchers also noted AI hiding a jigsaw piece in his hand for several minutes so that he could place the final piece into the jigsaw.⁴⁰ This serves to show how much we can draw from the simple observation exercise performed. To what extent might collaborators compete with one another?

The researchers concluded that "The approaches of both participants change when they work together with A2 making the bigger shift in his way of working".³⁸

Collaboration is a familiar term within the pages of Legal Information Management. In 2013, the theme of the BIALL Conference was "Collaboration, Co-operation, Connectivity". A conference paper submitted to LIM by Griffith and Smith on a collaborative project called LawSync bore echoes of the Bath University experiment. The speakers asked delegates to consider collaboration at their places of work. "The main challenges to collaboration inside organisations were different objectives between teams, different levels of understanding, enthusiasm, resources". This reinforces the statement by the

Bath University researchers that collaboration is not necessarily straightforward.

Bearing in mind the post-pandemic challenges that we will face and the probability that we might need to collaborate with colleagues as we return to the workplace, perhaps in sharing space and resources more stringently, it might be useful to remember the Bath University study and the lessons to be learnt from a collaborative jigsaw puzzling exercise.

JIGSAWS ARE USEFUL TOOLS IN LIBRARIES AND IN BUSINESSES

The idea of observing people construct jigsaw puzzles as an instructive methodology is not unique to the Bath study. Rebecca Jones is a Managing Partner of Dysart & Jones Associates in Canada. She focuses on strategy, problem-solving and leadership coaching within the library and information sector. In 1988 her article in *The Law Librarian* on Core Competencies⁴² contained numerous references to jigsaw puzzle terminology. For example of project management and process mapping: "This is the ability to break down a task or a process into bite-size pieces so that you can manage the overall task". The personal competencies in her 21st century Competencies Report refer to "an ability to see the big picture".

In a Zoom meeting in June 2020 Rebecca explained that her references to jigsaw puzzling were not unintentional, and that she has observed librarians' jigsaw participation as a means to an end in leadership development seminars. Some participants "don't want to play" she said, "but it is important for us to know our behaviours and reactions".

As we can see, jigsaws can be a useful tool in professional development, but on occasions they can be used to step back and pause for a while as a trend in university libraries demonstrates. One such place is Morris Library at the University of Delaware. In 2016 library staff hit upon the idea of making two or three jigsaw puzzles publically available to students as a low cost stress-reducing activity around exam time. The exercise gained immediate popularity amongst people passing through the library. "In our hyper-connected world with constant demands for our attention, focusing on a single task, like completing a puzzle, can put the mind into a meditationlike state. It creates a sense of peace and tranquillity".43 Nearer to home the Squire Law Library engages in a similar project during exam time, arguably following the model of Spilsbury's original educational dissections by putting out jigsaws with instructive pictures of the Courts or of a London map, for example.⁴⁴

Sanesco Health is a US based biotech and pharmaceutical company which always has a jigsaw puzzle in progress in its break room. They believe jigsaws increase the ability to learn and to remember through the release of dopamine every time a piece is successfully placed. "Dopamine causes improved motor skills, an increase in

concentration, optimism, confidence, and an enhanced recollection" says their Blog. 45 It is evident that Jigsaws are good for us.

One journalist who concurs with that is Jonathan Kay in his enthusiastically named article "Everything I know in life I learned from doing jigsaw puzzles". 46 Kay's assessment of jigsaw puzzling is unequivocal. Speaking in the context of "plugging away" at jigsaw puzzles as a research scientist would plug away at his or her project, Kay says: "no matter who you are, and what your field, solving problems requires that you observe the available data, look for patterns, try out different ideas, build out from what you've already mastered, and persevere until the project is finished". The comparison no doubt strikes chords with many professions - not least our own.

ARE LIBRARIANS DISSECTOLOGISTS?

This article's explorations so far reveal the jigsaw to be an educational and relaxing pastime often described as meditative; one of enduring popularity particularly in times of crisis, useful to researchers as a simple low-cost experimental tool, appreciated as a tech-free object and cognitively beneficial in its engagement of the whole brain. Yet the brain is complex and those complexities render the original task of comparing the mind of the librarian to the mind of the jigsaw puzzler vast. Nonetheless, the concept of attempting to establish and compare librarians' professional cognitive processes to another process is not novel.

In 2004 Reneé Bosman of the University of North Carolina produced a Master's paper 47 exploring her casual observation of a disproportionate number of left-handed librarians relative to the rest of the community which is noted at 11%. Her research aimed at ascertaining similarities between left-handedness and librarianship which might explain her observation. This LIM article's exploration of potential parallels between jigsaw puzzling and librarianship evidently coincides with Bosman's research.

Bosman noted "scant literature dealing specifically with the topic of cognitive styles and thinking processes of librarians" but, however, called upon Linda Marie Golian's 1999 paper "Thinking Style Preferences Among Academic Librarians: Practical Tips for Effective Work Relationships". ⁴⁹ In turn Golian drew upon a table of five thinking styles developed by Harrison and Bramson in 1984. ⁵⁰ She concluded that of 97 librarians surveyed the majority did not fit into any one of the five thinking styles: synthesist; idealist; pragmatist; analyst; realist, but that there was "the natural potential for librarians to develop a flat thinking style". ⁵¹ meaning "a natural predisposition towards using all five of the thinking styles". ⁵²

Bosman's conclusion was that as Golian found librarians mainly to be "flat thinkers" they would be likely to

use their whole brain for cognitive processes, employing both right and left hemisphere thinking styles.⁵³ Although we have established that jigsaw puzzling employs both brain hemispheres it would be oversimplifying logic to conclude that all librarians are therefore good jigsaw puzzlers. In addition, Bosman's examination of "what the library profession does"⁵⁴ served to prove that librarianship "is a profession that requires a variety of skills".⁵⁵ This will doubtless be unsurprising to readers of LIM who will be familiar with BIALL's Professional Skills Framework, which spans no fewer than 40 pages.⁵⁶

The knowledge that the brain is complex, that our individual job specifications vary greatly within the profession, and that librarians apparently do not fall within one defined thinking style somehow restricts the argument that all librarians will make good and enthusiastic jigsaw puzzlers. However, this key point does not preclude the notion that certain job specifications within library and information will demand the skills of a puzzler. For example Bosman focuses on the reference interview as an example of "the application of a holistic cognitive approach". 57 Reference enquiry librarians may indeed be able to identify with the need to focus on "the big picture" as well as on "the pieces" which go to construct it. It is of note that Heye's book "Characteristics of the successful 21st century Information Professional" written for enquiry work staff contains a chapter entitled "You see the big picture".58

Golian and Bosman's papers were echoed in a 2019 article authored by Bano, Mehraj and Rehman from the University of Kashmir⁵⁹ on the personality traits of librarians in the 21st century digital era, which noted the necessity for modern day librarians to embrace no fewer than 16 such traits. "The Sixteen Personality Factor (16PF)" includes, for example, reasoning, liveliness, social boldness, warmth and openness to change. Amongst those 16 factors "perfectionism" appears of striking relevance to this study of jigsaw puzzling. The Occupational Information Network O*NET (2018)60 lists competencies in alignment with this trait as "The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (eg. patterns of numbers, letters, words, pictures, mathematical operations)".60 The authors continued: "Perfectionism of librarians in terms of rendering his/her duties, an organization of knowledge in libraries includes ordering of library holdings according to a certain arrangement".60

Published studies seem therefore to indicate that amongst the extensive range of skills which are expected of today's librarian - referred to by the Kashmir University writers as a "Unicorn Librarian - that magical creature who can be all things to all people" - some tasks with parallels to jigsaw puzzling may be seen. The above quote on organisation is suggestive of classification, for example. Another task might be the reference enquiry interview by virtue of its holistic cognitive approach - searching for the detail within the bigger picture. A third might be loose-leaf filing. This suggestion may be somewhat intuitive, but interestingly it is a task

which falls well within the definition of "puzzle" as stated in *Psychology: A Contemporary Introduction* by Scott & Spencer: "From a psychological point of view the starting state, the goal state and the processes can be clearly specified".⁶² The starting state is a pile of inserts with filing instructions, the goal state is to file new and to dispose of old pages, and the instructions themselves offer a clearly specified process.

JIGSAW PUZZLES IN TEN QUICK QUESTIONS

In order to test the veracity of that suggestion and to seek enlightenment on other points of research in this study I ran a survey: "Jigsaw Puzzling in ten quick questions". Of 40 respondents, 20 worked within library and information including I6 librarians and 4 loose-leaf filers kindly recruited to respond by Malcolm Roberts who, with his team, has faithfully loose-leafed for nearly 30 years for his customers. The other 20 respondents worked in a wide range of sectors outside of library and information and were recruited for comparison.

Out of 40 responses the answer to "I enjoy doing jigsaw puzzles" Yes/No was 31 and 9 respectively, with the nine "No" responders consisting of five librarians, one loose-leaf filer and three from other sectors. The majority of "No" respondents were therefore library and information staff at 31% of their grouping followed by 25% of loose-leaf filers and 15% of those working outside of LIS.

The main reasons given for those disliking jigsaws were "I would be frustrated by missing pieces" at 53% and "I haven't sufficient patience to complete a jigsaw puzzle" at 37%. One third of "No" responders implied that lack of ability to do a jigsaw was a factor, indicating that although the activity is simplistic it demands definite cognitive skills.

Given the kinaesthetic nature of jigsaw puzzling I took the opportunity to include questions specifically on touch, and also on preferences between print and online to see to what extent respondents appreciated jigsaws as a non-digital activity in a digital world.

The results were perhaps surprisingly anti-vogue. Responses to "Whenever I read I prefer to hold a print copy text in my hand rather than reading online" ran at 77.5% with the breakdown "Strongly Agree" / "Agree" being 45% / 32.50% respectively. To "I would happily do a jigsaw puzzle online" 32.50% / 37.50% responded "Strongly Disagree / Disagree" respectively totalling 70%.

Interestingly, a recent study in Malaysia comparing the effect on cognitive functions of jigsaw puzzles with colouring - where the colouring was done in hardcopy and the puzzles done online - reported "a decline in concentration as observed in the jigsaw puzzle group" possibly due to "the exhaustion experienced by the participants from carrying out the study due to continuous and prolonged screen time exposure". 64

Returning to "Jigsaw Puzzles in ten quick questions"; touch, it appears, remains of some if not overwhelming

significance. 26% of those liking jigsaw puzzles "enjoy the tangibility of the pieces". 52% like "cardboard puzzles with a good quality feel". 22% of those who loose-leaf "enjoy the tangibility of the paper".

In order to compare jigsaw puzzling with loose-leaf filing I included the same questions in the jigsaw puzzle and the loose-leafing sections of the survey wherever appropriate. One or two patterns emerged as can be seen in the responses shown below for jigsaw puzzles (JP) / loose-leafing (LL) respectively. However individual respondents did not necessarily tick both boxes in each pairing:-

It gives me space to think through problems or ideas (IP) 32% / (LL) 33%

I can easily see progress made (JP) 42% / (LL) 41%

I enjoy the tangibility of the pieces / paper (JP) 26% / (LL) 22%

I enjoy having to concentrate without being overly taxed (JP) 68% / (LL) 59%

It presents a task I can see through to the end (JP) 52% / (LL) 41%

I enjoy it as a "screen-free" task (JP) 39% / (LL) 48%

It is challenging (JP) 52% / (LL) 22%

Jigsaw puzzles and loose-leaf filing appear to share some similar features and in both cases there is an appreciation of doing a task with a discernible end result. Additional comments from respondents on both puzzles and loose-leafing often highlighted the discernible end result as important; for example, "The main parallel would be that I can see the task through to completion, which is important to me".

Some librarian and loose-leaf respondents engaged with the idea that jigsaw puzzling and librarianship share skillsets. To: "Are/were there any duties on your job description which with you can see parallels with jigsaw puzzling"? Responses were; "tidying book shelves"; "basic shelving"; "preparing stock for binding – finding all the parts and putting them in right order"; "shelving – filing books in order of classification"; "looseleafing is a puzzle in itself, making sure the right pages are where they should be".

Three librarian respondents supported the idea that the reference enquiry - the "holistic cognitive approach" as previously mentioned - parallels jigsaw puzzling. Comments included "enquiry work is often a puzzle"; "literature searching to some extent, except that I have to find the different pieces of the puzzle rather than having them provided". "I think the closest is when responding to a request, trying to piece together what the user actually wants when they are not really sure of it themselves. Like a jigsaw puzzle when you don't have the original box". The third respondent has unwittingly perhaps echoed the position of the British Jigsaw Puzzle Library, founded in 1932, which supplies all its puzzles without guide pictures to "add to the challenge" and "to increase the overall enjoyment".65

More respondents appreciated "screen-free" time at work than at home, perhaps indicating a need or desire to get away from screens where we are most subjected to them. That 68% of respondents liking jigsaw puzzles appreciated them as an activity lacking in time pressures similarly shows how jigsaws are a useful escape from stressful factors.

One librarian disliking jigsaws but liking loose-leafing emphasised a distinction between work and leisure activities, thereby discounting the notion of fixed cognitive skills coming into play. He was seconded in this by one loose-leafer.

In terms of jigsaw puzzle themes Real Landscapes were the outright favourites at 77% followed by Fine Art at 52%. Fictitious Landscapes were also reasonably popular at 44%. A preference for landscapes may show a desire to recreate places unreachable during lockdown.

Just under half of "Yes" respondents showed any inclination towards John Spilsbury's original invention with 45% ticking "Maps" as one of up to five favourite themes. A mere 16% agreed that jigsaws are "educational and teach me about eg. real places or art". However, fantasy, gimmicky and humorous puzzles did not score highly. Only 6.5% of respondents had ever done a jigsaw of a real or imaginary library; that image is not often seen on puzzles. Suppliers were unavailable to comment during lockdown as to why.

The survey showed that in spite of not being able to keep the fruit of our jigsaw labours permanently intact - short of framing them which appealed to only 10% of respondents - the image is not wasted upon completion. 77% enjoy the image for some time before breaking it up and 61% store the puzzle to redo on another occasion. Interestingly, dissectologists are not avid collectors: only 6% of respondents would keep a jigsaw as part of a collection.

CONCLUSION

The aim of this article, besides revealing the history of jigsaw puzzles in times of both calm and crisis, was to explore possible parallels between librarianship and jigsaw puzzles. The author hopes that that exploration has also highlighted the assets of the jigsaw puzzle as a brain healthy activity with meditative qualities and one which has been globally appreciated in the recent lockdown, perhaps to provide a sense of achievement and satisfaction in an otherwise "messy world".24 The jigsaw's colourful history has its roots in the desire to educate and, although these days we may prefer to construct recreational rather than educational images, jigsaws are recognised as cognitively beneficial and useful in research projects as a simple, inexpensive tool to research into brain functions or activities such as collaboration. Libraries and some businesses provide jigsaw puzzles both to relax users and to increase levels of concentration. Not all librarians like jigsaw

puzzles but some library tasks seem to parallel jigsaw puzzling - for example classification, enquiry work and loose-leaf filing.

If anything, this study has highlighted that just like jigsaw puzzles, librarianship is a vast, multi-themed activity which makes many demands on our cognition. When work demands become too great some adherents turn to jigsaw puzzling as an activity with meditative qualities,

lacking in any time pressures and with a discernible end in sight.

Last but not least, in times of crisis some dissectologists prefer jigsaw puzzling to reading, and the study has demonstrated that in today's digital era when our main means of communication are often via technology, a sense of touch and the desire to handle tangible resources still remain desired connections.

Footnotes

- ¹ Unless otherwise indicated the historical facts in "Spilsbury's Invention" should be credited to: Hannas, Linda The English Jigsaw Puzzle 1760–1890. (Wayland (Publishers) Ltd. 1972).
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Biography

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