

CREATIVE-ARTISTIC ACTIVITIES THAT CAN HELP DRIVERS WITH DISABILITIES DEVELOP FINE MANIPULATION AND REDUCE STRESS AND ANXIETY

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Cite: Oravecz, Adrienn (2025): Creative-Artistic Activities that Can Help Drivers with Disabilities Develop Fine Manipulation and Reduce Stress and Anxiety. *OxIPO – Interdiszciplináris tudományos folyóirat*, VII. évfolyam 2025/2. szám. 23-32.
Idézés: Doi: <https://www.doi.org/10.35405/OXIPO.2025.2.23>



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EP / EE: Ethics Permission / Etikai engedély: KFS/2025/0008

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Absztrakt

KREATÍV-MŰVÉSZETI TEVÉKENYSÉGEK, AMELYEK SEGÍTHETNEK A FOGYATÉKKAL ÉLŐ VEZETŐKNEK A FINOM MANIPULÁCIÓ FEJLESZTÉSÉBEN, VALAMINT A STRESSZ ÉS A SZORONGÁS CSÖKKENTÉSÉBEN

A hagyományos rehabilitációs gyakorlatokon túl a művészet alapú tevékenységek, mint például a számozott kifestők és az üvegékszer-készítés, értelmes és élvezetes módját kínálják a finommozgások fejlesztésének. Ezek a tevékenységek nemcsak pontosságot és kontrollt igényelnek – amelyek elengedhetetlenek a biztonságos járművezetéshez –, hanem a koncentrált, meditatív elmélyülés révén elősegítik a relaxációt, csökkentik a

stresszt és a szorongást is. A tanulmány arra kíván rámutatni, hogy a számozott kifestők javítják a vizuomotoros koordinációt és strukturált sikerélményt nyújtanak, míg az üvegékszer-készítés a tapintási érzékenységet és a kéz izomerejét fejleszti az aprólékos kézműves munka során. Mindkét tevékenység lehetőséget ad az önkifejezésre, ami hozzájárul a mentális egészség megőrzéséhez és az önhatékonyság, önbizalom erősítéséhez, növeléséhez.

Kulcsszavak: művészeti tevékenységek, számozott kifestők, üvegékszer- készítés, mentálisegészség, vezetés mozgássérültként

Diszciplína: gyógypedagógia

Abstract

This article explores how creative-artistic activities can support drivers with disabilities by enhancing fine motor skills and promoting emotional well-being. Beyond traditional rehabilitation exercises, engaging in arts-based practices such as paint-by-numbers and glass jewellery making offers a meaningful and enjoyable way to develop fine manipulation. These activities not only require precision and control, which are essential for safe vehicle handling, but also foster relaxation and reduce stress and anxiety through focused, meditative engagement. The paper highlights how paint-by-numbers can improve visual-motor coordination and provide a structured sense of achievement, while glass jewellery making enhances tactile sensitivity and hand strength through detailed craftsmanship. Both activities allow participants to express themselves creatively, which contributes to mental health preservation and a stronger sense of self-efficacy.

Keywords: artistic activities, paint by numbers, glass jewellery making, mental health, driving with disability

Discipline: SEN

Individuals with disabilities who engage in driving often encounter challenges related to fine motor coordination and heightened stress or anxiety. This paper investigates how artistic activities, specifically painting and glass jewellery making, can serve as complementary therapeutic tools. The paper draws from historical background to modern applications to underscore the role of art in both mental and physical rehabilitation.

The Psychological and Physical Benefits of Artistic Expression

Art offers more than visual or cultural value; it acts as a form of therapy. Painting, in particular, has been historically regarded as a calming and mentally engaging activity. Winston S. Churchill, who began painting in his 40s, described it as a "companion" through life. He praised its mental absorption, calling it "complete as a distraction." Churchill highlighted paint-

ing's capacity to provide mental exercise, independence, and joy without physical exhaustion.

In the case of patriots, just like Churchill who have served in the military, numerous studies (Kaimal et al, 2022; Stickley et al, 2018; Howie, 2017; Sornborger, et al., 2017; Simith, 2016) have examined how various forms of artistic activity – just as in the case of the former British Prime Minister – can aid in processing battlefield-related trauma or significantly improve overall health by reducing the risk of developing post-traumatic stress disorder.

Pablo Picasso and Vincent van Gogh also acknowledged the transcendent power of artistic expression. Picasso believed that "art washes away from the soul the dust of everyday life," while van Gogh likened painting to an "inner fire"—a conduit for the joy of life. These statements reflect the profound psychological benefits associated with art.

In the following section, after the inspiring quotes, the author aims to present Winston S. Churchill – the former Prime Minister of the United Kingdom – from a new, perhaps less known perspective. To this day, Churchill receives more attention as a politician than as an enthusiastic amateur painter, even though he proved to be not only successful in his political career but also talented in painting. His life has been portrayed in numerous books (Haffner, 2019; Nógrádi, 2025) and films, such as *The Gathering Storm* (2002) or the perhaps much better-known *Darkest Hour* (2017).

Churchill the amateur painter and his book about painting:

He began painting relatively late in life, around the age of 40, in 1915, during a period of personal and political crisis after the Gallipoli campaign's failure. Painting became a source of solace and escape for him—he once called it his “joy ride in a paint-box” (see: Net1).

Winston Churchill's *Painting as a Pastime* is a short, reflective essay in which he shares his personal journey into painting and explains its psychological and emotional benefits. It was first published in 1932 in *The Strand Magazine*, and later included as a standalone book in 1948.

The benefits of painting and some useful suggestions from *Painting as a Pastime*

Churchill describes painting as an inexpensive independence as a mobile and perennial pleasure. He calls painting as a mental food and mental exercise. He suggests that the old harmonies and symmetries can be experienced in entirely different language. The language of art. He says it adds interest to common scenes and is an occupation for every idle hour. Finally adds that painting is an unceasing voyage of entrancing discovery.

The book is not a how-to manual, but rather a philosophical and inspirational essay encouraging others, especially adults, to take up new hobbies regardless of their age or experience. Beyond his personal

motivation and experience, Churchill also offers some useful advice in the book on how readers should get started with painting. He states that the first quality is needed is audacity or boldness. He suggests that we must just jump in and get started. We must not to be too ambitious and content ourself instead in a joy ride in a paint box. Painting should be a joyride as he thinks.

He views the journey of an artist as a lifelong pursuit. He states that every day you may make progress. Every step may be fruitful, yet there will stretch out before you an ever lengthening, ever ascending, ever improving path. At the end of the book, he finally provides some useful activities for his readers. The first one is painting from memory and the other painting during travelling.

Why painting from your memory and painting while you are travelling as Churchill suggested can be a useful practice to develop your driving skills?

Painting from memory and painting while traveling (for example, capturing a landscape or experience during a trip) can be useful practice in developing skills related to driving in several ways, even if it may not seem obvious at first.

1. Develop visual memory

Painting from memory strengthens imagination and visual memory, which is

important when driving, for example, when you need to recall previously seen signs, road conditions, you need to keep in mind the route or the layout of an intersection.

2. Spatial orientation and visual perception

Painting landscapes while traveling improves spatial perception, which is critical for driving.

Helps you better perceive distances and depth. Supports the ability to follow moving objects (for example, continuously tracking the position of other vehicles).

3. Concentration and focused observation

Painting teaches you to notice details, even if only for a moment – this skill is also important when driving: making quick decisions (e.g. detecting pedestrians, monitoring blind spots), quickly and accurately recognizing road conditions and signs.

4. Patience, observation and stress management

Painting can also be a meditative activity that reduces stress and increases patience. These are also important when driving, especially on long journeys or in busy cities.

5. Multimodal processing and associative learning

When you paint during a journey (even just in your head), you are simultaneously using vision, memory, and emotions. This type of complex processing is also activated when driving a car, for example

when driving on a familiar road and emotions or experiences are associated with it – so painting can help with this type of learning as well.

Development of fine motor skills with painting

Of course, it is not only Churchill's opinion that can be considered well-founded on this topic – science has also confirmed that painting is highly beneficial for developing fine motor skills, in addition to its enriching effects on positive mental health and personality. Oktavia et al. (2019) investigated the impact of using a paint application on young children's fine motor skills through colouring activities. A quasi-experimental, control group design was used. The control group engaged in conventional colouring using picture books, while the experimental group used a digital paint application. Conducted at Mentoring State Kindergarten, the study involved 60 children—30 in each group. Findings revealed that the experimental group outperformed the control group, with an average score of 83.25 compared to 76. Statistical analysis ($t\text{-test} = 2.161 > t\text{-table} = 2.07387$) confirmed that the difference was significant. Therefore, the use of paint applications positively influences the development of fine motor skills in early childhood. Another study by Rosdiana & Pratiwi (2023) explores how finger painting supports the cognitive, affective, and motor development of children aged 5–7 through creative activities. After engaging in finger painting,

the highest development was observed in the cognitive domain (72% at BD), with 18 children able to name colours. In the affective domain, 64% reached BD, with 16 children seeking guidance on the painting process. In the psychomotor domain, 60% showed progress by attempting to form shapes, though colours were still applied imprecisely. The results suggest finger painting effectively supports early development across multiple domains.

The studies clearly show that the earlier one is introduced to various painting techniques, the better. However, it is also important to emphasize that painting can have a positive impact even on the fully developed personality in adulthood, as seen in the case of Churchill and in rehabilitation studies conducted among soldiers.

History of paint-by-numbers

After the author has detailed the developmental impact of painting on driving skills, let's move on to the creative tool that has made the joy of painting accessible to everyone: paint by numbers. Paint-by-numbers was invented around 1950 by Dan Robbins (see Net2) in the United States.

Dan Robbins' 1998 memoir, *Whatever Happened to Paint-By-Numbers: A Humorous Personal Account of What It Took to Make Anyone an 'Artist'*, offers an engaging and detailed look into the creation and cultural impact of the paint-by-numbers phenomenon. In this 320-

page paperback, Robbins recounts how, inspired by Leonardo da Vinci's method of using numbered patterns for his apprentices, he developed the concept while working at the Palmer Paint Company in Detroit. His initial design, an abstract still life titled Abstract No. 1, was not well-received, prompting a shift to more traditional subjects like landscapes and animals. This pivot led to the massive success of the Craft Master kits, which sold millions in the 1950s and became a staple in American homes. The memoir delves into the challenges faced during the development and marketing of the kits, including innovative promotional strategies. For instance, Robbins recounts how his boss, Max Klein, distributed cash to employees to purchase kits at Macy's, creating the illusion of high demand and sparking genuine consumer interest. In this book Robbins responded to criticism as well by highlighting that the true value of paint-by-numbers lies in making the creative process accessible. Rather than claiming it as fine art, he sees it as a way to give people – especially those who might never try painting otherwise. Furthermore, he wanted to give the chance to experience the joy and satisfaction of creating something themselves. The book is noted for its conversational and enthusiastic tone, providing not only a business history but also a nostalgic look at mid-20th-century American culture. Readers have praised it for its insights into product development and its reflection on the democratization of art. For those interested in the inter-

section of art, commerce, and cultural trends, Robbins' memoir offers a unique perspective on how a simple idea transformed into a widespread artistic movement.

All in all, paint-by-numbers offered the joy of creating, self-expression, and structured creativity even for those who did not consider themselves “artistically talented.” Its popularity declined in the 1960s, but after the turn of the millennium, it experienced a revival – now available online in personalized (“custom”) versions as well. A collection of paint-by-number artworks were exhibited at the prestigious Smithsonian Institution's National Museum of American History in 2001. Figure 1 is an example of a paint-by-numbers picture.

Figure 1: Paint by numbers picture: Owl, level of difficulty 2 out of 5. Source: The author.



Glass Jewellery Making

– A Historical Overview

After thoroughly presenting Don Robbins' legacy, the writing will now provide a brief historical overview of glass jewellery making.

Ancient Egypt (c. 2500–1500 BCE): The earliest known glass jewellery originates from Egypt. Faience (a glass-like material) was especially popular and used for amulets and beads.

Roman Empire: The Romans further developed the techniques of glass bead making. Mosaic glass techniques (such as millefiori, meaning "a thousand flowers") began to be used in jewellery during this time.

Venice, Island of Murano (from the 13th century): Murano glass became one of the world's most renowned glass art traditions. It became particularly famous for the lampwork technique, where rods of glass are shaped into beads and miniature glass jewellery pieces over an open flame.

20th Century: The emergence of fusing (the melting of glass pieces together) and dichroic glass (glass coated with metallic oxide layers) marked a modern renaissance in glass jewellery making.

Brief Overview of Glass Jewellery Making Techniques

After the historical overview, continue on and take a look at the methods and techniques used to create glass jewellery.

Fusing: Different pieces of glass are fused together in a kiln at 700–800 °C. The result

is vibrant, smooth pieces with unique patterns.

Lampworking: Glass rods are melted in a flame and then shaped. It allows for intricate designs and a wide range of colours.

Sea Glass Jewellery: Naturally weathered glass pieces found on beaches are collected and used to create jewellery. Each piece is unique, with a frosted appearance due to natural tumbling by sand and waves. You can read more information about this technique from a book by Furber & Beuke (2021).

Millefiori Technique: This involves creating rods of glass with multi-coloured patterns, which are then sliced to reveal intricate floral or geometric designs. These slices are incorporated into jewellery pieces.

Enamelled Glass: A technique where powdered glass is applied to a glass surface and then fired to create colourful, glossy designs. This method allows for detailed and durable decorations.

Figure 2 shows the use of contour paint, which is used to highlight small details on porcelain items, such as the eyes. Using contour paint in porcelain painting adds unique characteristics to each ceramic piece. Figure 3 shows the finished pieces coated with three layers of porcelain paint. Their true colours will only appear after the firing process. Source: the Author

Mental Health Benefits of Crafting

Engaging in crafts such as glass jewellery making has been associated with various mental health benefits, including stress and

Figure 2: Porcelain painting workshop on 04.06.2025. Source: the Author.



Figure 3: Finished pieces coated with three layers of porcelain paint before the firing process. Source: the Author



anxiety reduction. While specific studies on glass jewellery making are limited, broader research on crafts-based interventions provides valuable insights.

Pöllänen (2015) revealed that crafts provided recreation, satisfaction, optimism, positive relationships, and support as well as helped participants to cope with negative feelings among 15 textile craft makers aged 27–57.

Hill et al. 2023 concluded that those who are strongly motivated by achievement often feel competent in the activities they engage in, which enhances their well-being. Personal projects that align with one's personality and allow for the fulfilment of basic psychological needs can be effective tools for improving mental health.

Bukhave et al. (2025) found some evidence that crafts-based interventions may benefit mental health and well-being, but as they think more high-quality research is needed. According to their opinion this new research should focus on more the mechanisms through which crafts-based interventions operate.

Closing Thoughts

This study was primarily written to offer ideas for people with physical disabilities to further develop the functionality of their hands. Second, the author's goal was to highlight the physical and mental benefits of painting through the example of Winston Churchill, an amateur painter. Last but not least, the intention was to encourage readers to explore self-expressive activities.

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