

How Art Heals Us

Scientific arguments for the social inclusion of people with special needs

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Abstract:

Art is a reflection of human creativity, encompassing a wide range of creative skills and practices. Artistic endeavors naturally tap into individuals' innate talents, potentials, and personal aspirations. The pursuit of art involves persistent efforts aimed at perfecting acquired skills to attain desired outcomes, thus mitigating anxiety often associated with potential failure, which can be a hindrance in traditional educational contexts.

In this article, we introduce theoretical perspectives influenced by neuroscience, educational psychology, and social psychology. Our objective is to help readers comprehend the significance of art therapy in the realms of social integration and the care of individuals with special needs.

Keywords: art therapy; neuroscience; social integration; people with special needs

Introduction

Art therapy is used by implementing the process of artistic creativity that helps fight against the disorders caused by illnesses or life injuries.

Art therapy is a treatment practice based on the therapeutic use of artistic creation. The latter involves the use of artistic mediations that can be pictorial, plastic, musical, bodily, etc. Art therapy will exploit

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artistic potential with a therapeutic and humanitarian aim. It helps improve the quality life of the person experiencing daily difficulties (illness, suffering, disability or life injury), whether temporary, long-term or permanent.

Historical Overview

According to Aristotle who was widely considered as the pioneer of modern aesthetics , art is a form of imitation, he defined imitation as the "representation of nature in the medium of human actions." In other words, he believed that artists could capture the beauty of the world around them with their own creative skills.

This form of imitation could displayed as painting, sculpture, poetry, drama, and other forms of creative expression. In particular, Aristotle argued that poets should strive to imitate nature to achieve the highest level of artistic excellence. (aristote, 1986)

He believed that by focusing on nature and its unique characteristics, an artist could create works that are true reflections of reality. For example, if an artist desired to paint a portrait of a flower, they should pay close attention to its color, shape, and texture.

Likewise, if a poet desired to write a tragedy about a family conflict, they should draw inspiration from real-life events. This is because the truthfulness of art lies in its accuracy to life itself. Thus, according to Aristotle, art is ultimately a form of imitation that enables us to better understand and appreciate the world around us.

The Therapeutic Effect of Catharsis

Aristotle believed that art, or more specifically, imitation, serves an educational purpose. He argued that art is a form of instruction should be used to teach moral and ethical lessons. He stated that the artist could "present us with a vivid realization of better and worse elements in our moral life" which can help us to become better people. It

purifies human's imagination and bad critical passions through empathy. (أرسطو، 1982).

He saw art as a way to improve society, and he believed that through art, we could gain insights into human nature and learn how to be better citizens.

Thus, the emotions represented by the tragic spectacle are based on the spectator's identification with the character. In this regard, the plot is built on the nobility or baseness of the characters, the happiness or misfortune drawn from the events. Its aim is to awaken “a human sense” by imitating the artist. Catharsis offers an artistic representation of a social function: by imitating situations which would endanger the order of the city in real life (crimes, incest, etc.),

The Contemporary Vision of Art therapy, Art in the 19th Century

Art, not a unique expression of the absolute, not a divine message, but the result of the obscure and painful debate of man, in the middle of creation, art presented in life, a simple relationship of events very ignoble to beautiful to the extent of what is prosperous and harmful (Clézio, 1967)

The birth of art therapy is attributed to the Marquis de Sade who, at the beginning of the 19th century staged plays at the Charenton asylum (Val-de-Marne) involving patients, caregivers and professional actors. . This approach developed in the United States during the 1940s by the psychotherapist Margaret Naumburg.

Among the first to be interested in the expression of mental pathology through art, highlighting 1) Marcel Reja (1873-1957) with L'artMalad: Drawings of Madmen in 1901 and L'art des fous in 1907; 2) Walter Morgenthaler with A Psychiatric Patient as Artist in 1921; and 3) HanzPrinzhorn with Expression of Madness. Drawing, painting, asylum sculpture in 1922 in which he studied productions (five thousand drawings) of patients hospitalized in psychiatry.

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In 1945, Adrian Hill, British painter, published his first book, *Art versus Illness*, in which he coined the term “art therapy”.

In 1950, the first international exhibition of psychopathological art took place at Sainte-Anne hospital in Paris on the first world congress of psychiatry: 2,000 plastic works (drawings and paintings) created by 350 mentally ill people. In 1955, the book *L’art psychopathologique* by Robert Volmat was published, dedicated to this exhibition (Giraud & pain, 2015).

In the 2008-2012 Alzheimer Plan, art therapy was recognized as a non-drug therapy, which will make it possible to exploit the creative possibilities of the sick person and help them to communicate, to express their emotions and their feelings. Both the creative process and the work produced are highly considered for their therapeutic significance than for their aesthetic value. The creations (painting, sculpture, pottery, modeling, drawing, etc.) will help relieve the sick person's anxiety and strengthen him in his own eyes and in the eyes of others.

In the 2009-2013 Cancer Plan, art therapy was recognized as a supportive care that contributes to improving the quality of life of patients. The first experiments with art therapy in hospitals for cancer patients took place in Anglo-Saxon countries. The idea consists of offering patients, children and adults, faced with hospitalization and heavy treatments affecting their self-image and sometimes-vital diagnosis, care that works with the creative process aims to encourage the participant to use their imagination to solicit their psychological or physical resources and better cope with their illness.

The 2013-2017 Autism Plan, art therapy is recognized as therapeutic support. The therapeutic meaning, for these people whose speech is lacking, is based on the possibility of entering into a relationship through another language. For these people whose main difficulty is a relational impossibility, it is to use mediation to dare to encounter the materials (modeling clay, gouache paint, acrylic, dry pastel, collage,

etc.) and consequently with the caregiver. It is also a possibility of existing through production by making choices and confronting gestures. Allowing this opening towards a creative space means allowing these people to reveal themselves around their often-unknown potential.

We also had access to an interesting document entitled a systematic review of subjective results in terms of well-being

Practicing visual arts for adults ("age range", 15-64 years) with diagnosed mental health issues.

By reviewing the work, we noted very conclusive and encouraging results regarding the treatment of patients by art therapy (Tomlinson, et al., 2018)

The Art that Heals ,art and neuroscience:

The Art That Heals Memory is the title of a book that allows us to better understand the impact of art (and culture in general) on our health and our ability to overcome life, at all ages. This book was written by Pierre Le Marquis and prefaced by Boris Cyrulnik .The author explains how art sculpts and caresses our brain and proves essential to our life. A tutor of resilience, it also broadens our vision of the world and transforms us in a process of healing, even rebirth.

"One day we will perhaps know that there was no art, but only medicine," writes J.M.G. Le Clézio (Clézio J.-M. G., 1971). The world Health Organization report of November 11, 2019 confirms its intuition and affirms that art can be beneficial for health, both physical and mental (oms, 2019) .

However, if we talk today about the virtues of art therapy it is also because of the prodigious discoveries of neuroscience and epigenetics (CDC, 2022)

Pierre the Marquis author of "the art that heals" explains; to put it simply, we have two brains. A part, which captures the information around us, and compares it to what we have in memory, and with

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which we decide to act on the world based on the information we have just received. We act to stay alive, which a computer could also do. Nevertheless, fortunately in our brain we have another part, archaic, responsible of pleasure and reward, which makes us want to live. Art acts on both: it serves to broaden our state of mind, to teach us new things, it acts on cerebral plasticity and therefore sculpts our brain, but also acts on our emotions; it caresses our brain and stimulates the hormones responsible for pleasure and attachment: dopamine, serotonin, oxytocin and endogenous morphine. This is what makes us want to live. This is what makes us human,” summarizes the neurologist (Kubik, 2021)

Today neuroscience makes it possible to explain the neural circuits used when one stands up to a piece of art.

In contact with a work of art, we resonate with the artist behind. This is what we call theory of mind: thanks to our mirror neurons, our brain tries to guess the artist's intention; we put ourselves in his place, even if he has been dead for years or centuries. By looking at the Mona Lisa, we become Mona Lisa. A work of art becomes vivid in which interaction with changes and transforms us. “Interaction is essential”.

An interaction that is impossible during the artistic experience is virtual, explains Pierre Le Marquis, because all non-verbal communication is absent, as well as the feeling of sharing an artistic experience in a group. “Watching a show on screen does not stimulate our imagination and creativity, which are fundamental to giving us a taste for life”.

If the viewer or listener likes the work, their stress decreases, because their production of cortisol, the so-called stress hormone, slows down. The heart beats less quickly, the body relaxes, and positive emotions spread through our body. A biochemical combination, which restores vitality, explains the researcher, composed of dopamine (the hormone of joy of life), endorphin (which gives the impression of well-being) and oxytocin (hormone of attachment and love).

Therewith specialists in neuroscience have also proven by conducting magnetic resonance imaging that music also has a very positive impact on the brain and they define it as a biological necessity for human beings: it contributes to building our brain and has probably played a decisive role in the survival of the species.

Music was also important to Aristotle, who believed that its power lay in its ability to move and affect emotions.

He thought that music should be used to convey emotion, mood, and atmosphere and that it should be composed with a certain structure and complexity (What Is Art According to Aristotle?)

By recounting the major scientific discoveries of the last twenty years, the authors of the book entitled “the neural symphony” explain how music connects, even before birth, our cognitive intelligence to our affective intelligence, and creates a “neural symphony” with multiple benefits for education and health throughout the lifespan. Music contributes to child development, promotes sociability and proves to be excellent academic support. It helps fight against cognitive aging and remedy brain pathologies. (Bigaud & tillmann, la symphonie neuronale, 2020)

There is a left hemisphere and a right hemisphere

The left half is concerned with complex functions such as language, mental abilities, the process of logical thinking, and assimilating theoretical information

The right hemisphere of the brain is responsible for everything related to non-verbal communication, such as facial expressions, body movements, spatial awareness, and everything related to creativity. It is everything we do without thinking. All blockages and traumas accumulate in the subconscious, and this is what art therapy methods seek to reach by stimulating the subconscious visual and motor spaces.

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Art is a non-verbal means of communication to express everything that cannot be expressed in language instead of speech. Through art, we address the right hemisphere, the place of creativity, through drawing, theatre, dance, mosaics, etc.

- Art is a psychological reflection or representation (realistic or symbolic) of situations and phenomena that take place in the context of their social and natural existence.
- It is the means through which a person, consciously or unconsciously, aims to achieve his psychological balance by expressing the perceptions, repressed perceptions, and representations within him.
- The communication between the therapist and the patient is a symbolic communication, and thus his experiences is transferred subconsciously into images. Another advantage is that it is easier for these subliminal images to avoid the suppression of the censor than it is for verbal expression. Since the patient's internal experiences are readily translated into images instead of words, it facilitates catharsis. About deep repressed material.
- Handicrafts and arts do not have a single solution like mathematics, so they encourage creative thinking and coming up with unique solutions.
- Researchers believed fifteen years ago that the synapses within each individual's brain were pre-programmed according to the person's genetic blueprints, but contemporary views do not agree with that vision.
- Scientists have realized that the main neural circuits responsible for functions such as breathing, regulating the heartbeat, and reflexes are innate and inherent from birth.
- However, there are other paths that are basic, but they are not developed, and these paths contain trillions of non-programmed,

subtle, primary connections that the environment surrounding the child and the experiences he goes through stimulate them.

- This stimulation is what works to complete the structure of the brain. Scientists currently believe that stimulation in the form of motor and sensory experiences in the early periods of development is extremely important for the brain to reach a state of discipline and high-precision completion. Recent studies have restored to art the therapeutic importance that existed since antiquity, but it was neglected in the hustle and bustle of life, only to be revived with the recent discoveries made by neuroscience.

Regarding the Social Integration of People with Special Needs

In many Arab societies, the role of educational institutions continues to be held in high regard as the primary avenue for achieving success in one's life. It's a cultural norm where children's social standing is often measured by their academic achievements. However, despite the passage of time, various issues and shortcomings have been identified in the educational system's ability to develop programs that cater to the diverse and multifaceted intelligences of children.

Over the years, it has become evident that traditional schooling methods don't always align with the varied strengths and talents of students. As the first formal institution a child encounters after their family, any struggles with school enrollment or difficulties in class performance can be unsettling for parents. Many still cling to the belief that academic success is synonymous with success in life. However, this is where the theory of multiple intelligences emerges, bringing about a revolutionary shift in educational philosophy.

The concept of multiple intelligences challenges the conventional wisdom by approaching education from a completely different perspective. It underscores the need to redefine what constitutes social success and adaptive intelligence, taking into account individual differences and the unique capabilities each person possesses. In

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essence, it emphasizes that there are multiple avenues to attain social harmony and to foster respect for individuals who may have been overlooked in the past.

This paradigm shift acknowledges the existence of highly intelligent individuals who may not have thrived in traditional school settings due to a lack of recognition of their unique talents and capabilities. By recognizing and nurturing these different forms of intelligence, we can create a more inclusive and equitable educational system that empowers all students to succeed in their own ways.

Theory of Multiple Intelligences and Perspectives of Adaptation and Social Integration

If we have addressed catharsis as a skill through which art therapy seeks to achieve social adaptation and integration for the individual, there are several other skills that it also achieves, including, for example, communication with the environment, emotional balance, expressing problems without control, employing mental processes, developing the senses, feeling confident, self-realization, and self-realization. Educational, professional and social compatibility, attention to individual value and preparing extraordinary children for an ordinary life (فراج، 2019). In numerous underdeveloped countries, the significance of educational institutions as the primary gateway to achieving social success persists. This success is often evaluated based on academic achievements, despite the many evident shortcomings, such as the inability to design suitable programs within schools that cater to the diverse and multiple intelligences of children.

The school holds a pivotal role as it is the first formal institution in society that children encounter after their families. Any setbacks in terms of school enrollment or performance in classes can be deeply unsettling for parents. The prevailing belief in these societies is that success in life is contingent upon success in school. However, there's a

paradigm shift underway, and it offers a fresh perspective on how we can redefine the concept of social success and adaptive intelligence.

Enter Howard Gardner and his theory of multiple intelligences, which revolutionizes our understanding of human abilities and offers a new educational philosophy that diverges significantly from conventional norms. Gardner's groundbreaking theory challenges the traditional psychometric views of intelligence, expanding our understanding of human potential.

Gardner first introduced his theory in his 1983 book, "Frames of Mind: The Theory of Multiple Intelligences." In this work, he posits that people possess various kinds of "intelligences" beyond the narrow confines of traditional intelligence assessments. This theory opens up a world of possibilities, suggesting that every individual has a unique combination of intelligences, ranging from linguistic and logical-mathematical to musical, spatial, and interpersonal intelligences, among others.

This broader perspective allows for a more inclusive approach to education, recognizing and nurturing the diverse talents and aptitudes of each individual. It offers a path for those who may not have excelled within the constraints of traditional education to rehabilitate themselves socially by capitalizing on their specific strengths and intelligences.

In essence, Gardner's theory of multiple intelligences offers a new framework to support a more equitable and individualized approach to education, emphasizing the diverse paths available to everyone for personal and social growth.

Howard Gardner's theory of multiple intelligences identifies a wide range of human intelligences that extend beyond traditional IQ measures. These eight intelligences provide a more comprehensive framework for understanding and developing an individual's abilities

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and has suggested the possible addition of a ninth known as "existentialist intelligence (Cherry, 2018) :

1. Visual-spatial intelligence: This intelligence involves the ability to think in images and visualize spatial information. People strong in this area tend to excel in tasks that require mental manipulation of visual information, such as artists and architects.
2. Linguistic-verbal intelligence: This is the traditional form of intelligence associated with reading, writing, and communication skills. Those with strong linguistic-verbal intelligence are typically good at languages, writing, and public speaking.
3. Logical-mathematical intelligence: This intelligence relates to analytical and problem-solving skills. Individuals with high logical-mathematical intelligence excel in mathematics, logic, and scientific reasoning.
4. Body-kinesthetic intelligence: People with this intelligence have excellent control over their bodies and physical skills. Athletes, dancers, and actors often possess high body-kinesthetic intelligence.
5. Musical intelligence: This intelligence involves a deep understanding of rhythm, melody, and pitch. Musically intelligent individuals are often talented musicians, composers, or music enthusiasts.
6. Interpersonal intelligence: This refers to the ability to understand and relate to other people effectively. People with high interpersonal intelligence excel in communication, empathy, and building positive relationships.

7. Intrapersonal intelligence: Intrapersonal intelligence is self-awareness and an understanding of one's own emotions, motivations, and inner thoughts. It is vital for self-reflection and personal growth.
8. Naturalistic intelligence: This intelligence pertains to a strong connection with the natural world and the ability to recognize and categorize elements of the environment. Naturalists and environmentalists often possess this intelligence.

It is worth noting that while Gardner's theory of multiple intelligences has gained significant popularity among educators, it has faced criticism for a lack of substantial empirical research to support its claims. Nonetheless, many teachers have found value in incorporating the theory into their teaching philosophies and classroom practices as a way to cater to diverse learning styles and strengths among students. This approach can make education more inclusive and engaging, recognizing that individuals may excel in various forms of intelligence beyond the traditional academic subjects.

Maslow's Hierarchy of Needs

Abraham Maslow's hierarchy of needs, first introduced in 1943, remains a cornerstone in the fields of personality science and motivation psychology. This theory has had a profound and enduring impact on our understanding of human behavior and the factors that contribute to an individual's sense of fulfillment and well-being.

The hierarchy of needs, as proposed by Maslow, identifies five fundamental human needs that drive behavior and emotional states:

1. Physiological Needs: At the base of the pyramid, physiological needs represent the most basic and critical requirements for survival. These needs encompass necessities such as food,

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water, shelter, and sleep. Fulfilling physiological needs is essential for one's biological well-being.

2. **Safety Needs:** The second level of the hierarchy pertains to safety needs. These include the need for physical security, stability, protection from harm, and a sense of order and predictability in one's environment. Ensuring safety is crucial for individuals to focus on higher-order needs.
3. **Love and Belonging:** Moving up the pyramid, love and belonging needs are social in nature. These needs encompass the desire for companionship, affection, relationships, and a sense of belonging to a community or group. Human beings are inherently social creatures, and these needs play a vital role in emotional well-being.
4. **Esteem Needs:** The next level comprises esteem needs, which encompass both self-esteem (respect for oneself) and the desire for respect and recognition from others. Achieving a sense of accomplishment and recognition in society is essential for one's self-worth.
5. **Self-Actualization:** At the pinnacle of the pyramid lies self-actualization, representing the realization of one's full potential and personal growth. Self-actualization involves the pursuit of creativity, self-discovery, and the development of unique talents and abilities. It is associated with a deep sense of fulfillment and self-fulfillment.

The hierarchical structure of Maslow's pyramid suggests that lower-level needs must be adequately satisfied before individuals can progress to higher-order needs. In other words, people cannot fully engage in self-actualization and personal growth until their basic physiological and safety needs are met.

Maslow's theory continues to influence a wide range of fields, including psychology, education, business management, and self-help. It provides a framework for understanding human motivation and well-being, emphasizing the importance of addressing individuals' fundamental needs in order to promote their overall happiness and success.

. (Gepp & West, 2022)

This theory underscores the universal nature of human needs and the importance of addressing them to achieve social integration and overall well-being for all individuals, regardless of their unique circumstances or challenges.

For individuals with special needs, the fulfillment of basic physiological and safety needs remains fundamental, just as it is for anyone else. Ensuring they have access to appropriate healthcare, nutrition, and a safe living environment is a critical starting point. Additionally, providing a supportive and inclusive educational and social environment is essential to meet their love and belonging needs. Everyone has a fundamental need to feel a sense of belonging and acceptance within their community, and individuals with special needs should not be excluded from this experience.

As individuals with special needs progress in fulfilling these foundational needs, they can work towards higher-order needs, such as self-esteem and self-actualization. Encouraging their personal growth, developing their unique talents and abilities, and recognizing their achievements can help boost their self-esteem and contribute to their overall well-being.

In essence, the application of Maslow's hierarchy of needs to individuals with special needs underscores the importance of a holistic and inclusive approach to their care and support. It emphasizes the rights of individuals with special needs to social integration and

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recognizes that their unique journey towards self-fulfillment is rooted in the same fundamental human needs as everyone else's. This perspective promotes a more compassionate and inclusive society where individuals with special needs can thrive and contribute to their communities.

Conclusion

In conclusion, the integration of art therapy into educational institutions represents a significant step in the fields of educational psychology, social psychology, and neuroscience. These theoretical approaches have highlighted the importance of art therapy as a method that can provide essential care and promote social integration for individuals with special needs.

By incorporating art therapy into educational settings, we create an inclusive environment that empowers individuals with special needs to reach their full potential and contribute positively to society. This approach not only enhances their well-being but also prevents them from becoming burdens on society, as they can develop their unique skills, express themselves, and find their place within the community.

The fusion of these theoretical approaches and the practical application of art therapy in education represents a promising avenue for supporting the holistic development of individuals with special needs. It recognizes the significance of tailored interventions that go beyond traditional teaching methods and fosters a more compassionate and inclusive society. As we move forward, it is crucial to continue researching and implementing these approaches to ensure that individuals with special needs receive the care, support, and opportunities they deserve.

Bibliography :

- aristote. (1986). *Metaphysique* (éd. 1986, Vol. tome1). (t. J, Trad.) edition librairie philosophique J.vrin.
- Bigaud, e., & tillmann, b. (2020). *la symphonie neuronale* (éd. Humensciences).
- Bigaud, e., & tillmann, b. (2020). *la symphonie neuronale, pourquoi la musique est indispensable au cerveau.* (humensciences, Éd.) france.
- CDC. (2022, aout 15). What is Epigenetics? Consulté le aout 10, 2023, sur CDC center for disease controland prevention: <https://www.cdc.gov/genomics/disease/epigenetics.htm#print>
- Cherry, K. (2018, mars). Gardner's Theory of Multiple Intelligences. Consulté le aout 09, 2023, sur verywellmind: <https://www.verywellmind.com/gardners-theory-of-multiple-intelligences-2795161>
- Clézio, e.-M. G. (1967). *l extase materiele.* paris: galimmard,idee.
- Clézio, J.-M. G. (1971). *les sentiers de la creation HAI skhira.* lausanne: Albert Skira.
- Gepp, K., & West, m. (2022, juillet 29). Maslow's hierarchy of needs: Uses and criticisms. Consulté le aout 2023, sur medical news today: <https://www.medicalnewstoday.com/articles/maslows-hierarchy-of-needs>
- Giraud, J.-J., & pain, b. (2015). Consulté le aout 28, 2023, sur cairn.info matiere a reflexion: <https://www.cairn.info/revue-hegel-2015-4-page-258.htm#:~:text=La%20naissance%20de%20l'art,malades%2C%20soignants%20et%20acteurs%20professionnels>.
- Kubik, S. (2021, mars 22). radio france. Consulté le 09 03, 2023, sur radio france: <https://www.radiofrance.fr/francemusique/pourquoi-l-art-est-il-indispensable-a-notre-cerveau-7956270>
- oms. (2019, novembre 11). L'art peut être bénéfique pour la santé, tant physique que mentale (OMS). Consulté le aout 23, 2023, sur <https://news.un.org/fr/story/2019/11/1055841>
- Tomlinson, A., Lane, J., Julier, G., Grigsby Duffy, L., Payne, A., Louise, M., et al. (2018, january). Full-report-art-mental-health-wellbeing-Jan2018_0146725200.p. Consulté le aout 16, 2023, sur https://whatworkswellbeing.org/wp-content/uploads/2020/01/Full-report-art-mental-health-wellbeing-Jan2018_0146725200.pdf

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What Is Art According to Aristotle? (s.d.). Consulté le 09, 2023, sur [www.atxfinearts.com: https://www.atxfinearts.com/blogs/news/art-according-to-aristotle](https://www.atxfinearts.com/blogs/news/art-according-to-aristotle)

أرسطو. (1982). كتاب أرسطو في الشعر. (دكتور إبراهيم حمادة، المترجمون) مكتبة الأنجلو سكسونية.

فراج ر. أ. (2019). الفن و ذوي الاحتياجات الخاصة. القاهرة: مكتبة الأنجلو المصرية.