Impairment and disability: Renoir's adaptive coping strategies against rheumatoid arthritis

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Abstract Pierre-Auguste Renoir was one of the most influential painters in art history, but few people know that he suffered from debilitating rheumatoid arthritis. Despite his arthritis, he was able to maintain an incredible level of precision and efficiency with his painting. More importantly, he remained positive and did not let his condition affect his passion for painting or take away from the beauty that he saw in the world around him. Renoir applied a wide variety of coping mechanisms and used his ingenuity to come up with different ways to continue painting even as his arthritis weakened him. Renoir's long battle with rheumatoid arthritis serves as an inspiration to patients who experience the pain and limited mobility associated with this disease, encouraging them to persevere and to develop coping mechanisms that prevent the effects of their impairment from disabling them.

Keywords Rheumatoid arthritis · Renoir · Disability · Impairment

The history of impressionist art was enlightened by many celebrated artists, but few could match the talent and intensity of Pierre-Auguste Renoir. Considered by many to be one of the most influential painters throughout art history, his works have dazzled spectators since his humble beginnings as a porcelain painter, which helped him pay his way

through art school. His artistic ability coupled with a skillful use of color enabled him to capture the joy and intimacy of a scene in each one of his paintings and evoke great emotion from spectators of all backgrounds. Through his paintings, he always strove to depict the positive qualities of his subjects, finding inspiration in the harmony of nature and the enchanting beauty of its creations. He once commented that art should be pretty, “Yes, pretty! Life brings enough unpleasantness; why not approach it from the light side once in awhile?” [2]. Renoir was always careful not to let a scene influence the depiction he envisioned, preferring instead to use the scene as a guide to paint what he was feeling.

Few people know, however, that this remarkable painter suffered a great deal from rheumatoid arthritis during the last 20 years of his life. Despite the debilitating effects of this disease, Renoir was able to overcome the pain and distress to create one masterpiece after another. Renowned art historian Götz Adriani attests that Renoir's pictures reveal nothing of the trials and worries that were part of his personal life and that he seemed to be happy, despite his initial lack of recognition and the difficulties he faced throughout the years [1]. Painting was his passion but also served as an outlet to forget his misery. Despite the ever increasing impairment resulting from his progressive rheumatoid disease, he channeled all of his strength into his work, preventing him from ever considering himself disabled.

Many people who suffer from rheumatoid arthritis have a difficult time dealing with the pain and physical deformity associated with the disease, leading them to label themselves as disabled [11]. With rheumatoid hand disease, as with other hand conditions, the mindset of the patient largely determines the perception of impairment or disability [3]. An optimistic outlook has been shown to boost the psychological status of patients suffering from rheumatoid arthritis and other illnesses, whereas a pessimistic demeanor has the opposite effect [17, 18, 20, 21]. Renoir became famous for his aptitude as an artist, creating thousands of paintings over

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the course of 40 years due to the resolve and overly critical nature of his character. It was this same tenacity, dedication, and passion for his work, and his optimistic outlook on life that allowed him to enjoy such great success as an artist. No matter how much he suffered or how debilitated he became, he strove to keep things simple and remained lighthearted. Renoir truly cherished the beauty of the world and the love he had for life was disseminated onto every canvas that his brush touched, a feature that shines through in each of his works.

Progression of the Disease

Renoir maintained an incredible level of productivity throughout his years as a painter, with an estimated 4,000 paintings completed during his long and fruitful career [2]. Even during the advanced stages of arthritis, he continued to paint with an extraordinary amount of precision and efficiency. Through the examination of letters to friends and family, it is possible to approximate that rheumatoid arthritis began to affect the artist around the age of 50 in the year 1892, becoming quite destructive by 1903 (Fig. 1) [5]. It is difficult to determine the exact effect the disease had on his painting style primarily due to a scarcity of knowledge regarding the artist's private life, yet experts continue to debate this subject [1, 5, 14]. Götz Adriani, a noted art historian previously mentioned in this paper, attests that as Renoir's hands became more deformed and crippled, "his eyes focused all the more sharply on the splendid intensity of color." The historian goes on to say that Renoir's increasingly disfigured fingers "swept with ever-increasing

Fig. 1 The ulnar deviation and volar subluxation that often accompany rheumatoid arthritis are both clear in this picture of Renoir at age 71

lightness across the canvas, bringing forth a finely woven fabric of color structures in delicate transparent tones." However, one thing remains abundantly clear: the emotional aspect of his painting was not adversely impacted by his arthritis, as his optimistic nature remained consistently present in all of his works, even during times of great pain or hardship. A famous painter of the period, Pierre Bonnard, once said of Renoir, "He worked from within his own nature and had the capacity to take a model or a light that at times seemed dull and imprint it with the memory of thrilling moments" [4].

Today, patients utilize a variety of coping mechanisms to deal with the pain, limited mobility, and mental distress that accompanies rheumatoid arthritis. The progression of Renoir's arthritis forced him to employ different coping mechanisms similar to the coping strategies used by some modern Rheumatoid Arthritis (RA) patients, which permitted him to continue to express the harmony of nature through his paintings. As his arthritis became increasingly problematic, Renoir began to travel throughout Europe to search for treatment options that would help alleviate the symptoms and slow the progression of the disease [15]. He not only suffered from the classic hand disfigurement associated with rheumatoid arthritis, but experienced painful ankylosis of his shoulders and elbows, in addition to having nodules on his back and elbows. Once the ankylosis prevented him from standing, he remained mobile through the use of a series of wheelchairs and seats, each designed for a specific purpose. His sedan chair was an armchair with two large poles secured to the sides, used to carry him into his car, up and down stairs, and over landscape that did not permit access by wheelchair. The wheelchair that he used for painting had a seat that was "not too soft" and, although painful to Renoir, it enabled him to sit in the proper orientation that permitted movements essential for painting [1, 15]. In his later years, the warmer climate of southern France became a necessity to keep his symptoms at bay during the harsh winter months. As his condition worsened, the expert medical opinion of the time recommended spa treatments to help relieve his symptoms. These spa treatments became part of his therapeutic regimen until his arthritis made the process of traveling to the remote spas more costly than the limited benefit he received from the treatments. Even so, Renoir continued to paint, traveling whenever his condition allowed in search of inspiration for his projects. The recognized artist, Henri Matisse, met with Renoir in his old age and commented, "as his body dwindled, the soul in him seemed to grow stronger continually and express itself with more radiant ease." This statement is clear when looking at his later works that are saturated in vibrant color and teeming with positive energy [6, 9, 14].

There are many reasons it is difficult to determine the effect Renoir's arthritis had on his paintings, most notably his modest demeanor and the seamless evolution of his painting style over the years. As one expert explains, in

terms of his paintings, “there was neither a first manner nor a final period: Renoir’s art developed after the fashion of a normal, average man, neither more poetical or intelligent than another” [9]. There are clear changes that occur during the progression of his arthritis, yet these cannot be definitively attributed to his disease. In his early paintings, years before he experiences any effects of arthritis, his paintings are distinguished by a bright, happy atmosphere and rich detail, showcasing his masterful use of color. His painting *Bal du moulin de la Galette* (Dancing at the Moulin de la Galette, 1876), with its fluid brush strokes and expert use of color is a perfect example of this feature. Another of his most well-known pieces, *Le déjeuner des canotiers* (Luncheon of the Boating Party, 1881) displays the beginning of his divergence from impressionism, with slightly more vibrant and vivid colors than previous works (Fig. 2).

Renoir’s trip to Italy in March of 1881 saw him influenced by the Italian Masters of the Renaissance, evident in paintings such as *Deuxsoeurs* (*Sur la terrasse*) (Two Sisters on the Terrace, 1881), which appears much more animated and refined than his previous works, and *Baigneuse* (Bather, 1882), with its simplified palette, divergence of tone, and contrast in color [7]. These two works mark Renoir’s departure from the classic ideal of the impressionist style, although he would never completely abandon this theme, with the skillful use of color remaining the foundation of his paintings. In later years, Renoir was drawn back to his interest of the female form, and with the accompanying evolution in his painting style, the colors and background of his works became softer, almost appearing to blend together. Unlike his earlier paintings containing backgrounds full of activity and intricate detail, his later works featured less elaborate backgrounds designed to draw viewers towards the focal point of the painting. It can be argued

Fig. 2 The painting *Le déjeuner des canotiers* (Luncheon of the Boating Party, 1881) demonstrates the beginning of Renoir’s divergence from impressionism

that this change in style is a direct result of the progressively limited mobility caused by his arthritis that made it too difficult to paint more complex pieces, but the change could just as easily be attributed to his constantly evolving technique [1, 9].

In 1912, Renoir was taken to a prominent physician with the promise of regaining his ability to walk. After weeks of carefully following the physician’s strict treatment regimen, Renoir was able to take several steps by himself for the first time in over 2 years. After a short while, he recognized the immense strain he was putting on his body and gave up walking, stating “It takes all my will-power, and I would have none left for painting.” Renoir’s son, Jean, explained that this was the last time the painter would walk, and the love he had for life, which he was no longer able to enjoy physically, was henceforth thrust onto his canvas. Jean commented that even as his palette became “more austere, the most dazzling colors” and “the most daring contrasts issued from it” [15]. Renoir’s later paintings *Baigneuse assise* (Seated Bather, 1914) and *La Ferme Des Collettes* (The Farmhouse at Les Collettes, 1915) (Fig. 3) are both examples of this type of soft yet energetic painting. He was truly a master of his craft and despite any changes in his condition or style, his paintings were always designed to elicit a positive emotional response from the viewer.

Adaptive Techniques for Impairment

Studies have shown that psychological comorbidities such as depression have a deleterious impact on the outcomes of

Fig. 3 The painting *La Ferme Des Collettes* (The Farmhouse at Les Collettes, 1915) is another late painting by Renoir showing the transition to a softer style of painting

patients suffering from rheumatoid arthritis [12, 16, 22, 23]. Zautra et al. recently documented that a history of depression increases pain among rheumatoid arthritis patients, finding that both joint pain and bodily pain were linked to a patient's history of depression [22]. Coping can be defined as the psychological and behavioral steps taken that help a patient to manage the psychological stress triggered by an illness. There are two main types of coping described in the literature: problem-focused and emotion-focused strategies. The problem-focused coping strategy involves making changes to oneself or the physical environment in order to decrease stress. The emotion-focused strategies are designed to either change the way in which the environmental relationship is acting upon a person or to change the meaning of a particular occurrence in order to limit the psychological stress that is caused by an incident [13]. Sinclair and Blackburn explain that adaptive coping strategies utilize both problem-focused and emotion-focused strategies to improve functional and psychological outcomes [19]. In this paper, the Nagi disablement model of impairment and disability is used to elucidate the functional deficits resulting from Renoir's arthritis. The newer International Classification of Functioning, Disability, and Health (ICF) classification system developed by the World Health Organization is designed to evaluate the functional and psychosocial attributes relating to a patient's dysfunction to assess the patient's "situation" as a whole. It would have been interesting to see how this model assessed Renoir's "situation" throughout the progressive stages of his arthritis.

It is apparent that Renoir employed both problem- and emotion-focused strategies to stay positive and productive throughout his struggle with arthritis. The physical coping mechanisms (problem-focused coping strategies) that Renoir utilized demonstrate the passion he had for art and his determination to fight his impairment and prevent disability. These strategies are useful for improving functional outcomes, and Renoir made good use of his ingenuity in many ways to limit his impairment. One of the creative ways he enabled himself to continue painting larger pieces was through a system of horizontal cylinders and a crank that would bring a particular section of the canvas within reach of his disfigured hand while he remained sitting [15]. When his hand became so deformed that he could no longer pick up the brush himself, he had the brush carefully placed into his clenched hand that was preemptively wrapped with soft cloth (Fig. 4) to prevent sores from forming. He would often be driven or carried to areas where he liked to paint so that he could gain exposure to inspirational scenes and events. When he no longer possessed the strength to hold his palette, it was placed between his knees to hold it in place, and later fixed onto his wheelchair in a manner that permitted it to swivel from side to side [15]. In his old age, Renoir would nurse cats to keep himself warm while painting, as is evident by the cat hair that is now used to verify the authenticity of his later works [5]. Renoir's son,

Fig. 4 In this picture, Renoir's deformed, clenched hands are seen wrapped in cloth to prevent sores from forming. Unable to walk and constantly struggling to avoid becoming cold, the coat and blankets seen covering Renoir became essential to keep him warm in his old age. (Used with permission from the Musée d'Orsay, Paris)

Jean, mentions that the artist believed physical exercise would help to halt the progression of his arthritis, becoming a daily part of his routine for many years. He states that Renoir relied on juggling and ball games to keep his hands active and mobile, until he was no longer physically able to hold anything on his own [15].

The same psychological coping mechanisms (emotion-focused coping strategies) that Renoir employed to deal with his rheumatoid arthritis are commonly used today to improve a patient's quality of life. In a study on newly diagnosed rheumatoid patients, Gåfvels et al. found that over half of the study participants had psychosocial problems severe enough to warrant some type of psychological intervention [10]. This demonstrates the serious impact arthritis can have on a patient's quality of life and the importance of the emotional coping component. Englbrecht et al. recently found that high coping effectiveness is linked to improved health perception and even to enhanced health status [8]. They noted that coping strategies may promote coping effectiveness in patients with rheumatoid arthritis, which, in turn, can improve the mental and physical well-being of a patient. A recent study on adaptive coping strategies looked at the various coping mechanisms women with arthritis use to deal with their rheumatoid arthritis. The authors found that the first step was accepting role limitations, followed by reclaiming control, reframing their situation, and bolstering courage [19]. In addition, the women in this study focused on positive changes

that they used to construct appropriate coping strategies to help them manage the psychosocial aspects of their rheumatoid arthritis. It appears that Renoir used many of these same adaptive coping mechanisms in his tireless effort to express his emotions through his art (Fig. 5a–d).

Accomplishments While He Had Arthritis

Some have argued that Renoir was able to create some of his best work when his arthritis was at its worst [1, 6]. During

the early 1900s, when his arthritis became exceedingly troublesome, Renoir still managed to produce an incredible volume of work, even adding sculpting to his repertoire. Once he no longer possessed the physical strength and dexterity required for sculpting, he would guide assistants to fashion the exact depiction he intended. Young sculptors such as Richard Guino and Marcel Gimond were directed to add or remove little bits of clay until the sculpture was complete. Both of these men would go on to become world-renowned sculptors, in part, due to the guidance and inspiration they received while working with Renoir. Due to

Fig. 5 **a** Renoir quickly accepted his role limitations in several ways, most notably through accepting physical limitations and accepting dependence on others. As his arthritis increased in severity, Renoir was forced to rely more on friends and family for daily activities, such as helping him get to his studio and putting his brush in his hand. (Adapted from: Sinclair VG, Blackburn DS. Adaptive coping with rheumatoid arthritis: the transforming nature of response shift. *Chronic Illn*2008;4: 219–230.) **b** As the arthritis began to affect other parts of his body, Renoir learned to reprioritize his time and to pace activities. The energy drain accompanying his arthritis forced him to travel less and paint at a decreased speed, although he still maintained incredible efficiency. (Adapted from: Sinclair VG, Blackburn DS. Adaptive

coping with rheumatoid arthritis: the transforming nature of response shift. *Chronic Illn*2008;4: 219–230.) **c** For Renoir, painting helped him find meaning, and this was only strengthened by his condition. (Adapted from: Sinclair VG, Blackburn DS. Adaptive coping with rheumatoid arthritis: the transforming nature of response shift. *Chronic Illn*2008;4: 219–230.) **d** Renoir was able to bolster his courage in many ways, including the encouragement he gained from others, the desire to paint, and waiting for a medical breakthrough that would help with his disease. (Adapted from: Sinclair VG, Blackburn DS. Adaptive coping with rheumatoid arthritis: the transforming nature of response shift. *Chronic Illn*2008;4: 219–230.)

Renoir's financial stability in his old age, the pursuit of potential buyers for commissioned portraits was no longer a necessity, yet he continued to paint portraits of the people who he cared for most, including art dealers, family, and friends. These works are regarded as some of Renoir's most vibrant and colorful paintings and indicate the important role his companions played as a support structure, a concept that can be translated to all patients with hand disorders.

One expert has argued that the vivid youthfulness of his later paintings was a declaration against the problems brought about by old age [1]. Close friend and acclaimed painter, Albert Andre, believed that the gallant vertical composition of Renoir's son, Jean, as a huntsman (Fig. 6), who claimed to hate hunting, was a disguised response to the critics who said that Renoir's arthritis limited him only to small or horizontal paintings [2, 7]. The painting measures over 5 ft in height and approximately 3 ft wide, a truly remarkable accomplishment for someone confined to a wheelchair in the advanced stages of rheumatoid arthritis with limited shoulder range of motion.

Pierre-Auguste Renoir was a remarkable artist on many different levels, despite a debilitating case of rheumatoid arthritis. His passion for art and his love of life propelled him to see the world in a magnificent light, transmitting these feelings onto canvas for everyone to enjoy. The coping

Fig. 6 Albert Andre believed that Renoir painted Jean Renoir as a Huntsman, 1910, to prove that he was not disabled to his critics

strategies he used to keep himself optimistic, his strong will, and the support of family and friends gave him the strength to produce thousands of beautiful works of art. He refused to have his impairment culminate in disability and did everything in his power to prevent this occurrence. Renoir was truly an inspiration for anyone suffering from rheumatoid arthritis to fight through the impairment and effects of the disease and persevere. Renoir's dream had always been "to create riches with modest means," and he accomplished this task with every masterpiece that he produced [15]. His long battle with rheumatism became a testimonial that demonstrates a productive life in the face of a potentially debilitating physical dysfunction.

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References

- Adriani G. Renoir. Cologne: [London]: Dumont; Yale University Press (distributor) 1999; 19, 54.
- André A. Renoir. Paris, G. Crès, 1919; 30, 32, 36–39.
- Bear-Lehman J. Factors affecting return to work after hand injury. *Am J Occup Ther*. 1983;37:189–94.
- Bonnard P. Pierre-Auguste Renoir. *Comedia*, 1941; 1.
- Boonen A, van de Rest J, Dequeker J, et al. How Renoir coped with rheumatoid arthritis. *BMJ*. 1997;315:1704–8.
- Cowart J, Fourcade D. Henri Matisse: the early years in Nice, 1916–1930. New York: H.N. Abrams; 1986. p. 19.
- Distel A. Renoir. New York: Abbeville; 2010. p. 209–347.
- Englbrecht M, Gossec L, DeLongis A, et al. The impact of coping strategies on mental and physical well-being in patients with rheumatoid arthritis. *Semin Arthritis Rheum*. 2012;41:545–55.
- Florissoone M. Renoir. Paris: [New York]: French and European publications, inc.; The Hyperion press (distributor) 1938; 14.
- Gafvels C, Hagerstrom M, Nordmark B, et al. Psychosocial problems among newly diagnosed rheumatoid arthritis patients. *Clin Rheumatol*. 2012;31:521–9.
- Geuskens GA, Burdorf A, Hazes JM. Consequences of rheumatoid arthritis for performance of social roles—a literature review. *J Rheumatol*. 2007;34:1248–60.
- Katz PP, Yelin EH. Prevalence and correlates of depressive symptoms among persons with rheumatoid arthritis. *J Rheumatol*. 1993;20:790–6.
- Lazarus RS. Coping theory and research: past, present, and future. *Psychosom Med*. 1993;55:234–47.
- Louie J. Renoir, his art and his arthritis. Brussels: Elsevier; 1987. p. 43–4.
- Renoir J. Pierre-Auguste Renoir; monpère. Paris: Gallimard; 1981. p. 1–507.
- Rupp I, Boshuizen HC, Roorda LD, et al. Poor and good health outcomes in rheumatoid arthritis: the role of comorbidity. *J Rheumatol*. 2006;33:1488–95.
- Scheier MF, Carver CS. Optimism, coping, and health: assessment and implications of generalized outcome expectancies. *Health Psychol*. 1985;4:219–47.

18. Scheier MF, Carver CS. Dispositional optimism and physical well-being: the influence of generalized outcome expectancies on health. *J Pers.* 1987;55:169–210.
19. Sinclair VG, Blackburn DS. Adaptive coping with rheumatoid arthritis: the transforming nature of response shift. *Chronic Illn.* 2008;4:219–30.
20. Treharne GJ, Kitas GD, Lyons AC, et al. Well-being in rheumatoid arthritis: the effects of disease duration and psychosocial factors. *J Health Psychol.* 2005;10:457–74.
21. Treharne GJ, Lyons AC, Booth DA, et al. Psychological well-being across 1 year with rheumatoid arthritis: coping resources as buffers of perceived stress. *Br J Health Psychol.* 2007;12:323–45.
22. Zautra AJ, Parrish BP, Van Puymbroeck CM, et al. Depression history, stress, and pain in rheumatoid arthritis patients. *J Behav Med.* 2007;30:187–97.
23. Zautra AJ, Smith BW. Depression and reactivity to stress in older women with rheumatoid arthritis and osteoarthritis. *Psychosom Med.* 2001;63:687–96.