

News, Views and Comments

Twin Artists: Unique Sources of Inspiration and Talent/Twin Research Reviews: Ethnic and Racial Factors Affecting Type of Twin Delivery; Outcomes in Twins Conceived Naturally and With Reproductive Assistance; Delivery Time for Growth-Discordant Twins; 3D Study of Twins' Facial Resemblance/In the Media: Baseball Players With Divergent Careers; Basketball Twins in the Elite 8; Twins' Grave and Epitaph; Twins Conceived Three Times in 2 Years; Twins in the Hockey Hall of Fame; Superfetated Twins

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Abstract

The unique sources of artistic inspiration and talent of twin artists are examined. The professional literature is rich with twin studies of creativity, but lacking when it comes to specific artistic domains — for example, painting and sculpting. The section that follows provides reviews of current research on ethnic and racial factors affecting type of twin delivery, pregnancy outcomes when twins are conceived naturally or with reproductive assistance, the effects of intrauterine growth discordance on the timing of twin delivery, and three-dimensional (3D) assessment of twins' facial resemblance. The final section summarizes information about twins in the media. The stories include twins distinguished for both baseball playing and physical injuries, twins who reached the National College Athletic Association's Elite 8, a twin pair's grave and epitaph, a mother who conceived twins three times in 2 years, twins in the Hockey Hall of Fame, and a set of superfetated twins.

Twin Artists: Unique Sources of Inspiration and Talent

This article on twin artists and the unique sources of their inspiration and talent was motivated by a recent book, *Twindentity*, by Mònica del Rey Jordà (2021). Mònica and her identical twin sister, Gema, are visual artists who work together to create video artwork and installations. They each form precisely half of their professional undertaking, *Art Al Quadrat* (del Rey Jordà & del Rey Jordà, 2022). The twins are based in Sagunto, Spain, a province of Valencia.

In 2013, I served as an outside reader for Mònica's PhD thesis in Fine Arts, completed at the Universitat Politècnica de Valencia, in Spain. She was able to transform that work into a book for which I wrote the prologue (Segal, 2021a). *Twindentity* prompted me to look more deeply into genetic and environmental influences on visual arts skills, and the relationship of twins whose creative works

are uniquely and often mutually inspired and produced. Mònica, a member of the International Society for Twin Studies, was unaware that I was writing this article.

The concept of *twindentity* is, as we are informed early in the book, 'a play on the words *twin* and *identity*'. It refers specifically to one's identity as a twin, and the different forms this identity can take are illustrated by the many twin artists who are interviewed. When we reach the concluding chapter of the book, we gain a more complete sense of what *twindentity* means for twin working in the arts: 'a set of layers that shape a unique feeling that is only experienced by those people who, having shared the same pregnancy and been born at the same birth, decide to clearly and visibly highlight their twinship through art' (del Rey Jordà, 2021, p. 127). We are also reminded that 'being an artist and a twin does not necessarily lead to working as a team' (p. 127). Twinship may, or may not, figure into twins' artistic works, something that may change over time.

Twin Artists at Work

It is illuminating to listen to some artistic twins (mostly identical) describe the way they work. As Mònica noted in a chapter that she aptly titled 'Four-Handed Work, What a Spectacle', some twin artists express their twinship directly in their art, others do so

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during the creative process and some do both. The Santilari twins, Josef and Pere, work together in the same space and at the same time. They combine their separate visions into what they call ‘the third Santilari’, which emerges when they paint a picture together. In contrast, the Jackson twins bring their separate life experiences to their work that eventually become merged into one. Other twins recognize some limitations when working with their twin, in that an idea or concept may not be developed to the fullest. Mònica points out that these different approaches are carried out consciously.

I was especially intrigued by a pair of twins who independently recognized a particular concept to apply to their sculpture after meeting with a curator and other artists. In my first twin study of cooperation and competition, I observed this phenomenon, as well. Pairs of young monozygotic (MZ) and dizygotic (DZ) twins were asked to complete a puzzle together, sequences that were filmed for later analysis (Segal, 1984). The MZ twins showed greater success at the task and expressed more cooperative behaviors than the DZ twins. I believe these differences came from their similar, genetically based information processing skills, motivations, and work styles — just like many of the artists at work. I have revisited the topic of twins working together and twin relationships in subsequent papers (see Segal, 2018, 2021b).

Twin Studies of Artistic Skills

The psychological literature includes many twin studies of creativity (e.g., Bouchard et al., 1993; Kandler et al., 2016). In contrast, I was surprised to find very few twin studies examining genetic and environmental influences on visual arts skills. However, two relevant studies are important to review. A reared-apart twin study of applied creativity, using Draw-a-Person (DAP) and Draw-a-House (DAH) pictures composed by participants in the Minnesota Study of Twins Reared Apart, is available (Velázquez et al., 2015). The creativity of these drawings was rated by independent judges. Genetic influences were demonstrated for the DAP (.38–.47), but not for the DAH. Creative personality, as assessed by the Adjective Checklist, showed genetic effects (.50). The monozygotic twins reared apart intraclass correlation for creative personality ($r_1 = .52, p < .001$) significantly exceeded the dizygotic twins reared apart correlation ($r_1 = .12$).

A twin study of working in a creative profession is also relevant to this discussion (Roeling et al., 2017). Twins working in various design fields were among the many artistic areas included. Genetic influences were estimated to explain 70% of the variance, with the remaining variance explained by unique environmental influences; however, the visual artists were not examined separately. A compelling illustration appended to the discussion shows a pair of Dutch MZ twin painters, David and Pieter Oyens. The authors note that these 19th-century artists are typical of MZ twins who show greater concordance for creativity than DZ twins. Interestingly, the illustration shows the twins’ portraits that were painted by each other — the twins appear quite different in manner of dress and body posture, although both are looking downwards. Each twin’s use of lighting also seems to differ.

MZ Twin Painters: A Selective Sampling

The separate and shared works of three pairs of MZ twin painters reveal individual differences and common threads. The most fascinating pair I came across are the Seidenbeutel twins, Ephraim and Menasche, known as Sashe and Menashe (Gliński, 2015). They were born in 1902 to a poor Jewish couple in Warsaw,

Poland. Their older brother was an artist who introduced the twins to painting. According to some people, when Menasche was admitted to Warsaw’s Fine Arts School, the twins alternated taking classes, so they paid only one tuition. When this was discovered, the school’s rector allowed them to continue studying and to pay just one fee.

The brothers had a unique emotional bond and created many paintings together. When painting a portrait of a model, one twin might begin, then stop and say, ‘My brother will come do the nose’ Even their individual works showed similarities in style, color and form. Unlike their older brother, neither twin depicted Jewish life in their paintings.

Unfortunately, the twins’ careers were cut short when World War II broke out, causing them to seek shelter with a colleague in Lviv, located in Ukraine. After that, they spent time in Moscow and then the Bialystok Ghetto. Here they were required by the Germans to create reproductions of famous works of art that they had to do for no pay. When the ghetto was liquidated in 1943, the twins were first sent to the Stutthof concentration camp in northern Poland, before being transported to KL Flossenbürg, near the German border with Czechoslovakia. Just days before the 1945 liberation, one twin was beaten by a guard — when his brother tried to save him, they were both killed. Their life story is tragic — they passed away too soon under horrific circumstances, leaving behind an exceptional collection of artistic creations.

I was captivated by MZ female twin artists, Irina and Marina Fabrizius (BBC, 2015). The twins were born in Kazakhstan, but relocated to Baden-Württemberg, Germany with their family. The twins are graduates of Dusseldorf’s Academy of Arts. Irina and Marina like to paint vivid landscapes and pictures that evoke memories from their childhood. They use a technique called *glazing* in which a thin layer of oil paint is applied to an oil painting in a way that blends, rather than conceals. Light passes through the layer and reflects back, allowing a mix of colors to be seen in each layer (Smith, 2017).

Irina and Marina began their careers by painting separately, but each recognized individual weaknesses that her sister did not have. Combining their artistic efforts was a way of overcoming these difficulties — one twin could not create shadows and the other twin had difficulty depicting trees. They were convinced that mutual effort paid off when one twin painted a scene that was exactly like what her cotwin had envisaged. They often paint without speaking. Irina and Marina insist that their art will remain at the core of their lives, even if they marry and have families. Irina expressed the twins’ relationship well by saying, ‘We have found each other in the shadow, and we have been united in the light.’ And, according to Marina, ‘Her love of art is my love of art.’ The brief video of the twins, available at the address listed in the reference section (BBC, 2015), is worth watching.

The last pair of twins I will discuss are the famous Albright brothers, Ivan and Malvin (known as Zsissly to other artists). A *New York Times* article announced a two-person exhibition featuring these artists at New York City’s Associated American Artists Galleries (Jewell, 1945). Each twin would have approximately 30 oil paintings and some watercolor paintings on display. Their painting shows some differences — Zsissly uses brighter colors and his landscapes and still lives appear more natural. However, it was noted that the twins’ paintings ‘seem not at all inharmonious when hung together’.

I was curious as to whether the Albright twins ever collaborated. They did, in fact, work together on the famous painting of Dorian Gray used in the 1944 film, *A Picture of Dorian Gray*. A wonderful picture of the twins working together on this portrait is available (Smithsonian, 2022).

Future Twin Studies of Fine and Visual Arts

The book *Twindentity* and the lives of the twin artists described above identify many measures worth studying by twin researchers. MZ–DZ twin comparisons of the source of ideas, degree of collaboration, use of color, and preferred medium would enhance understanding of artistic interest, talent, and success. Twins who are professional artists, amateur artists, and nonartists could offer different insights into artistic processes and outcomes. Applied tasks (e.g., copying a figure, selecting a color) would be meaningful complements to interviews and questionnaires.

Twin Research Reviews

Race/Ethnicity and Type of Twin Delivery

A study to determine if race/ethnicity affects the type of twin delivery (cesarean section or natural delivery) was undertaken by Pinson et al. (2022) at the University of California, San Diego. The impetus for the research was the observation that American women of color are more likely to experience maternal morbidity and C-section delivery than Caucasian women. The sample included 796 multiple pregnancies, in which prospective mothers were distributed as follows: 47.8% Caucasian, 29.9% Hispanic, 10.5% Asian/Pacific Islander/Alaska Native, 5.6% Black, and 6.3% Other/Mixed. Gestational age at delivery was constant across groups, as was the rate of C-section delivery. It was concluded that further research into the type of delivery across racial and ethnic groups is warranted.

Pregnancy Outcomes When Twins Are Conceived Naturally and With Reproductive Assistance

One of the few population-based studies of the mode of twin conception was reported by Mandourah et al. (2022) at McGill University in Montreal, Canada. Data on 90,552 multiple birth pregnancies conceived naturally were compared with 3219 multiple birth pregnancies conceived by in vitro fertilization (IVF). The IVF pregnancies showed higher risks for pregnancy-induced hypertension, gestational hypertension, preeclampsia, and placenta previa. In addition, the women with IVF pregnancies were more likely to experience cesarean section delivery, early membrane rupture, postpartum hemorrhage, and other adverse conditions. The frequency of congenital anomalies and small for gestational age status was higher among the IVF group. However, group differences in risks of eclampsia, preterm delivery, operative vaginal delivery, hysterectomy, or intrauterine fetal demise were not observed.

Delivery Time for Growth-Discordant Twins

Twins concordant or discordant for intrauterine growth restriction (IUGR) are at increased risk of stillbirth and neonatal death. A meta-analysis of monochorionic and dichorionic twin pregnancies, with and without IUGR, was recently undertaken by Koch and colleagues (2022). A key question was whether or not the timing of delivery should be influenced by fetal growth disorders. Data analysis indicated that fetal risks alone should not determine the optimal time for delivery in the absence of monitoring. The goal is to reach a balance between the competing risks of stillbirth and neonatal demise.

3D Study of Twins' Facial Similarity

An intriguing 3D study of facial similarity followed a set of MZ female twins from age 6 months to 5 years (Gibelli et al., 2022).

This is the first study to apply a 3D–3D superimposition approach to very young children. Prior to this report, studies of facial similarity were conducted on adolescent and adult twins. Similarities were calculated at eight different time points. It was determined that facial resemblance between the co-twins was greatest at the youngest age. In addition, comparing the findings with older twins revealed that facial similarity was greater in childhood. This pattern supports an increasing contribution of environmental factors to facial morphology over time — contrary to the increasing contribution of genetic factors found for other human traits, such as general intelligence and religiosity (Knopik et al., 2017).

A serious shortcoming in this analysis was the researchers' failure to document the method(s) by which the twins under study were MZ. The fact that the findings were consistent with that classification is not equivalent to an independent assessment of twin type by a DNA test or physical resemblance questionnaire.

In the Media

Baseball Players with Divergent Careers

Ben and Zach Joyce are identical twins from Knoxville, Tennessee, whose early baseball ambitions nearly derailed (Nichols, 2022). The twins were small for their age and experienced severe pains as they were growing up, linked to the fact that their growth plates were too far apart. However, after following a careful diet and exercise routine, they overcame their physical difficulty, and grew to be 6 feet, 5 inches (Ben) and 6 feet, four and three-quarter inches (Zach). They played high school baseball and were eventually admitted to the baseball program at Walters State Community College, in Morristown, Tennessee where they led the team to the junior college world series in Grand Junction, Colorado. At the time, Ben was humming in balls at 101 miles per hour, while Zach was closer to 97. The twins were eventually recruited to play for the University of Tennessee. However, prior to joining the university's baseball program, an unexpected event occurred.

The twins' nearly parallel sports paths diverged when Zach suffered a sudden arm injury, requiring Tommy John surgery. Tommy John surgery is used to repair a torn ulnar collateral ligament (Johns Hopkins Medicine, 2022); the ligament is located on the inside of the elbow. This type of injury is not uncommon in activities that require throwing and both twins were pitchers (Henry Ford Health System, 2016). Zach eventually left the sport, but is thriving academically at the University of Tennessee. He is an intern for a major defense contractor in Knoxville and has started his own real estate firm, known as Newcastle Investment. He admits that he and his brother, despite their strong bond, are no longer competitive.

Ben remained in baseball. In the fall 2020, he experienced the same injury as his brother and underwent the same surgery. An intensive rehabilitation program followed, but the reward was enormous. In spring 2022, in a game between the University of Tennessee and Georgia Southern University, Ben pitched a 103 mile per hour ball at the age of just 19. This stunning achievement brought attention from hundreds of fascinated baseball fans and professionals. His one regret was that his twin brother and his parents had left the game early to catch the last flight home. In fact, Ben later exceeded his own record by pitching a ball at 105.5 miles per hour (Castrovince, 2022).

It is unfortunate that Zach's baseball promise has been unfulfilled. Identical twins — especially identical twins reared apart — are the only people who are truly able to seem themselves in a life not lived.



Fig. 1. Grave and epitaph of identical twins, Isidor (Iz) and David (Dave) Bernstein. Photo credit: Jessica Bernstein, Isidor's daughter

Basketball Twins in the Elite 8

Identical twins and basketball players, Hassan and Fousseyni Drame, were largely responsible for the entry of a little-known school into the 2022 National College Athletic Association's (NCAA) Elite 8 (Men's Basketball, 2022). The twins played for the Peacocks, the team of St. Peter's University in Jersey City, New Jersey. The 6-foot, 7-inch twins have also represented their home country of Mali, at Mali's 2019 FIBA U19 World Cup; however, the team lost the championship. It was recently announced that both twins will be joining the basketball team of La Salle University, in Philadelphia, Pennsylvania. Meanwhile, Ben was selected by the *Los Angeles Angels* team early in the third round of the 2022 Major League Baseball amateur draft. This choice was, no doubt, prompted by his 105.5 mph pitch. He may become the first player to reach the major league from the draft class (Anderson, 2022). For Ben's twin brother Zach, it is another part of a life not lived.

Twins' Grave and Epitaph

I was in touch with Jessica Bernstein, daughter of an identical twin, while writing my recent book, *Deliberately Divided* (Segal, 2021c); however, she had contacted me earlier about the extraordinary age of her father and cotwin. Her father, the late Dr Isidor Bernstein (Iz) lived until 106.1 years of age, while his twin brother David (Dave) lived until 101.5 years of age. I wondered if these twins had been the longest-living identical male pair and researched that possibility in my role as a consultant for the twins' page of the *Guinness World Records*. They were not — that distinction still belongs to Glen and Dale Moyer who both lived until the age of 105 years (*Guinness World Records*, 2022).

Over the course of our email exchanges, I learned that Jessica's father had been a member of the New York Psychoanalytic Society and Institute from the late 1940s until 2000. Jessica suspects her father knew Dr Peter Neubauer (the psychiatrist who studied the intentionally separated twins with psychiatrist Dr Viola Bernard), but she does not know if her father was aware of the twin study collaboration. As I write in my book, Jessica observed, 'It's hard for me to imagine that he would have been comfortable with that research, given how close he was with his twin brother' (p. 364).

Jessica kindly shared photographs of the twins' grave and epitaph adding, 'I visited my dad's grave on Memorial Day

[2022]. You might appreciate the photo that I have on the headstone ... The twins are sharing a life jacket. A metaphor for sure, possibly intended when the pic was taken.' Jessica authored the epitaph in 2017 — two images of the gravestone are displayed in Figure 1.

Twins Conceived Three Times in 2 Years

Courtney Spears and her husband had a young son when she delivered her first set of twins — identical boys — at the Maternal-Fetal Medicine Clinic (Woman's Hospital), in Baton Rouge, Louisiana (Georgiou, 2022b). Several months later Courtney discovered she was pregnant again and delivered her second set of twins — fraternal girls — in July 2021. With five children to care for, she and her spouse decided that Courtney should undergo a tubal ligation to prevent further conceptions. When the surgery was completed, she was informed by her physician that she had conceived prior to the procedure — a third set of twins. A hospital doctor speculated that Courtney's situation is so rare that it would be difficult to find valid statistics to reflect its actual frequency. There are women who naturally conceive more than one set of twins, but controlling for the many underlying factors (e.g., maternal age, family history, twin type), could prove problematic. Note: The zygosity of the twin pairs in question was provided in the article, but the assessment method was not.

Twins in the Hockey Hall of Fame

Identical twin hockey stars, Daniel and Henrik Sedin, will both be inducted into the Hockey Hall of Fame in November 2022 (Murphy, 2022). The twins are originally from Sweden, but were drafted together 17 years ago by the Canucks, a Canadian team. In addition to playing together, they are retiring together after a stellar career. In their final year, they were jointly awarded the King Clancy Trophy, for leadership on and off the ice and for humanitarian contributions — the first time this honor was bestowed upon two people at the same time. Their other honors are also closely matched. Henrik received the Art Ross Trophy and the Hart Trophy in 2010. He also won gold medals for Sweden at the 2006 Olympics and at the 2013 World Championships. Daniel received the Art Ross Trophy and the Ted Lindsay Award in 2011. Like his brother, Daniel won a gold medal at the 2006 Olympics. He also won a silver medal at the

2014 Olympics, a year that his twin brother did not compete. Not surprisingly for identical twins, in their team's history, Daniel is only behind Henrik for games played, assists, and points.

Superfetated Twins

A case of twins conceived 5 days apart by Odalis Martinez, a mother in San Pablo, California, was reported this year (Georgiou, 2022a). According to her physician, Martinez miscarried several months before learning she was pregnant in November 2020. When she had her first scan, she was informed that she was carrying two fetuses, conceived 5 days apart during the same week. The twins, Lilio and Imelda, were delivered on August 10, 2021, and weighed 6 pounds, 12 ounces and 7 pounds, 3 ounces, respectively. Martinez was told by her doctors that the girls were not technically twins. She also commented that many people think the girls are identical, even though technically they are not. She admits that they look very similar.

I find this report puzzling and troubling for several reasons: (1) the method by which the conception interval of 5 days was determined is unknown; I wonder whether such specificity is possible; (2) the twins could have been a superfecundated pair — that is, Martinez may have released two eggs simultaneously that were then fertilized several days apart. In contrast, in cases of superfetation, the second conception occurs several weeks after the first conception when ova are released in what would be considered the next menstrual cycle; (3) the twins may have originated from a single zygote that divided several days after conception — if a DNA test was performed, there is no mention of it. Given their physical identity, identical twinship remains a possibility; and (4) both superfetated and superfecundated multiples *are* technically twins, given that they are natural variants of the fraternal twinning process (Segal, 2021d).

References

- Anderson, R. J. (2022). MLB Draft: Angels select Tennessee flamethrower Ben Joyce, whose fastball has hit 105 MPH. <https://www.cbssports.com/mlb/news/2022-mlb-draft-angels-select-tennessee-flamethrower-ben-joyce-whose-fastball-has-hit-105-mp/>
- BBC. (2015). Identical twin artists who paint together without talking. *BBC News Magazine*. <https://www.bbc.com/news/av/magazine-32735289>
- Bouchard Jr, T. J., Lykken, D. T., Tellegen, A., Blacker, D. M., & Waller, N. G. (1993). Creativity, heritability, familiarity: which word does not belong? *Psychological Inquiry*, 4, 235–237.
- Castrovince, A. (2022). He throws 105 mph . . . and is the Draft's biggest mystery. *MLB.com*. <https://www.mlb.com/news/ben-joyce-s-105-mp-fastball-reaches-mlb-draft>
- del Rey Jordà, M. (2021). *Twidentity*. Art al Quadrat Publishing.
- del Rey Jordà, M., & del Rey Jordà, G. (2022). *Art Al Quadrat*. <https://www.artalquadrat.net>
- Georgiou, A. (2022). Mom conceives twice in 5 days in 'miracle' pregnancy, kids born on same day. *Newsweek*. <https://www.newsweek.com/mom-conceives-twice-5-days-miracle-pregnancy-kids-born-same-day-odalis-martinez-san-pablo-california-1683283>
- Georgiou, A. (2022). Woman pregnant with third set of twins in two years: 'Unheard of'. *Newsweek*. <https://www.newsweek.com/mom-conceives-twice-5-days-miracle-pregnancy-kids-born-same-day-odalis-martinez-san-pablo-california-1683283>
- Gibelli, D. M., Cappella, A., Dolci, C., Rosati, R., Bedoni, M., & Sforza, C. (2022). A longitudinal 3D investigation on facial similarity among two monozygotic twins in their first childhood: an application of the 3D-3D facial superimposition technique. *Children*, 9, 187.
- Gliński, M. (2015). The twin brothers who painted and perished as one. *Culture.PL*. <https://culture.pl/en/article/the-twin-brothers-who-painted-and-perished-as-one>
- Guinness World Records. (2022). Oldest identical twins ever (male). <https://www.guinnessworldrecords.com/world-records/oldest-twins-male/>
- Henry Ford Health System. (2016). Throwing fastballs may be linked to Tommy John surgery in MLB pitchers. *Medical Press*. <https://medicalxpress.com/news/2016-05-fastballs-linked-tommy-john-surgery.html>
- Jewell, E. A. (1945). Joint art display by Albright twins. *New York Times*, p. 26.
- Johns Hopkins Medicine. (2022). *Tommy John surgery (Ulnar Collateral Ligament Reconstruction)*. Johns Hopkins Medicine. <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/tommy-john-surgery-ulnar-collateral-ligament-reconstruction>
- Kandler, C., Riemann, R., Angleitner, A., Spinath, F. M., Borkenau, P., & Penke, L. (2016). The nature of creativity: the roles of genetic factors, personality traits, cognitive abilities, and environmental sources. *Journal of Personality and Social Psychology*, 111, 230–249.
- Knopik, V. S., Neiderhiser, J. M., DeFries, J. C., & Plomin, R. (2017). *Behavioral genetics*. Macmillan Higher Education.
- Koch, A. K., Burger, R. J., Schuit, E., Mateus, J. F., Goya, M., Carreras, E., Biancolin, S. E., Barzilay, E., Soliman, N., Cooper, S., Metcalfe, A., Lodha, A., Fichera, A., Stagnati, V., Kawamura, H., Rustico, M., Lanna, M., Munim, S., Russo, F. M., . . . Li, W. (2022). Timing of delivery for twins with growth discordance and growth restriction: an individual participant data meta-analysis. *Obstetrics & Gynecology*, 139, 1155–1167.
- Mandourah, S., Badeghiesh, A., Baghlaf, H., & Dahan, M. H. (2022). Pregnancy outcomes in multifetal gestation who underwent in-vitro fertilization (IVF) as compared to spontaneous conceptions [A332]. *Obstetrics & Gynecology*, 139, 96S.
- Men's Basketball. (2022). *Men's basketball adds Hassan and Fousseyni Drame to roster*. La Salle University Athletics. <https://goexplorers.com/news/2022/5/23/mens-basketball-adds-hassan-and-fousseyni-drame-to-roster.aspx>
- Murphy, B. (2022). Who is in the 2022 Hockey Hall of Fame class? Daniel and Henrik Sedin, Roberto Luongo headline six honorees. *The Sporting News*. <https://www.sportingnews.com/us/nhl/news/2022-hockey-hall-of-fame-class/dy048kt0kncnsrrbk3h61onq>
- Nichols, J. (2022). Baseball, brotherhood and a bond never broken: meet Ben and Zach Joyce. *FanNation*. <https://www.si.com/college/tennessee/baseball/baseball-brotherhood-and-a-bond-never-broken-meet-ben-and-zach-joyce>
- Pinson, K., Mims, J. R., Ballas, J., Pettit, K. E., & Ramos, G. (2022). Maternal race/ethnicity and mode of delivery in twin gestations [A273]. *Obstetrics and Gynecology*, 139, 79S.
- Roeling, M. P., Willemsen, G., & Boomsma, D. I. (2017). Heritability of working in a creative profession. *Behavior Genetics*, 47, 298–304.
- Segal, N. L. (1984). Cooperation, competition and altruism within twin sets: a reappraisal. *Ethology and Sociobiology*, 5, 163–177.
- Segal, N. L. (2018). Twins working together: collaboration or contest. *Twin Research and Human Genetics*, 21, 563–569.
- Segal, N. L. (2021a). Prologue. In M. del Rey Jordà (Ed.), *Twidentity* (pp. 9–12). Art al Quadrat Publishing.
- Segal, N. L. (2021b). Kin detection cues and sibling relationships: Revelations from twin and adoption studies. Commentary on Tanskanen, Danielsbacka, & Rotkirch (2021). *Evolution and Human Behavior*, 42, 491–493.
- Segal, N. L. (2021c). *Deliberately divided: Inside the controversial study of twins and triplets adopted apart*. Rowman & Littlefield.
- Segal, N. L. (2021d). Twin types: variations and common themes /twin research reviews: birth weight and brain development; twinning and vocabulary. *Twin Research and Human Genetics*, 24, 89–94.
- Smith, M. J. (2017). What is glazing in oil painting? *Online Art School*. <https://onlineartschool.com/art-school/oil-painting-techniques/what-is-glazing-in-oil-painting/>
- Smithsonian. (2022). Ivan and Malvin Albright, working on a painting for the film. *The Picture of Dorian Gray*, 1944. *Archives of American Art*. <https://www.aaa.si.edu/collections/items/detail/ivan-and-malvin-albright-working-painting-film-picture-dorian-gray-4771>
- Velázquez, J. A., Segal, N. L., & Horwitz, B. N. (2015). Genetic and environmental influences on applied creativity: a reared-apart twin study. *Personality and Individual Differences*, 75, 141–146.