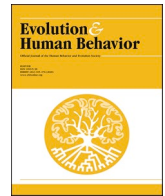




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## Book Review

**“People try to do good things in life, but sometimes seemingly good deeds can be offensive” – A review of “Deliberately Divided” by Nancy Segal.**

Imagine discovering one day that there was another person in the world who shared much of your personality, your physical looks and mannerisms, your tastes for various foods, your media and pop-culture preferences, educational or career aspirations, or even similar wishes to reside in particular locales. Often our best friends in life share far fewer characteristics than such a list of overlapping factors, so to share time and space with someone who was so similar to you would likely bring a great deal of joy. Now imagine that the person was someone who you *would have* shared a life with as a twin sibling, but you were separated shortly after birth due primarily to the unfounded belief of one psychiatrist (or maybe two?) that separation was in the best interests of you and your twin as adoptees. Furthermore, imagine that your separation was later used as fodder for a scientific study – and I use that description loosely here – to assess the differential influences of nature and nurture on a variety of medical, psychological, and behavioral outcomes. Additionally, imagine that your separation would be kept secret not only from you and your twin but also (sometimes) from your birth mother, your adoptive family, and virtually anyone interested in the study outside a small circle. Moreover, your participation in the study was obtained during the adoptive process by your adoptive parents as a *condition of your adoption* – a serious violation of conflict of interest – and all without prior informed consent! Well, all this and more is what occurred to over a dozen people – perhaps more – as part of the Louise Wise Services-Child Development Center twin study (LWS-CDC) beginning in the early 1960s and is described in fascinating detail by Nancy Segal (Segal, 2021) in her new book, *Deliberately Divided*.

For readers of this journal who may not be familiar with her, Dr. Nancy Segal is a leading scholar on twins in general, and *the* leading scholar on twins reared apart. Dr. Segal, who is a twin herself, is currently Professor of Psychology and Director of the Twin Studies Center at California State University, Fullerton. *Deliberately Divided* is her seventh book about twins and much like many of her other books, it focuses on the life history details of the people involved in an incredible story. Unlike some of her other books, however, *Deliberately Divided* is less focused on the science and logic of studying twins and is instead centered on detailing the people involved with and affected by the LWS-CDC study, and there are many such stories. Segal provides these stories

with incredible detail; indeed, to call this book detailed is like calling Mount Everest an interesting pile of rocks – it just doesn’t quite capture its full nature and grandeur. The details, however, do not overpower what is a highly readable and informative book. Segal truly captures the totality of the stories of the individuals impacted by these events and a reader will experience a wide range of emotions throughout the book’s chapters.

While you may or may not be familiar with Dr. Segal’s work,<sup>1</sup> you might be familiar with some of the story associated with the LWS-CDC study from the 2018 documentary, *Three Identical Strangers* directed by Tim Wardle (Wardle, 2018a). The film outlines the story of a set of identical triplets who were adopted to separate families as infants and who later discovered each other by chance in late adolescence. Since the triplets became a media sensation after their chance discoveries, there was a great deal of raw material to draw on for the documentary. The details in the film – as well as 2017’s *The Twinning Reaction* (another documentary based on the LWS-CDC study; (Shinseki, 2017) – pale in comparison to those presented by Segal in *Deliberately Divided*. Even those familiar with the documentary will find a wealth of new information in Segal’s book. More importantly, readers will also be treated to a compilation of chapters that describe the original study, the figures who directed the study, the vitally important stories of the twins and their families, as well as fascinating discussions regarding the ethics and legalities of such a study and the information (including data) that it produces.

Segal begins the story in the preface by laying out the basic underpinnings to what would become the LWS-CDC study: a Columbia University psychiatrist, Dr. Viola Bernard, conceived of the notion that adopted twins<sup>2</sup> would be better off being raised in separate families as it would reduce the parental burden of raising two same-age children, decrease sibling competition, and more easily encourage or allow for the formation of individuality. The unverified and untested argument was used as the basis to inform the placement policy of twins for the Louise Wise Adoption Services in New York City for several decades. As Segal outlines in later chapters, while Dr. Bernard claimed that the rationale for the separation policy was guided by the current child developmental literature of the time, it appears to have been based on a shockingly low number of *cases studies* of one to three pairs of twins. Another psychiatrist, Dr. Peter B. Neubauer, worked with Dr. Bernard to set up the eventual LWS-CDC study where the separated children were to be followed long-term to address questions associated with the so-called

\* Quote by Sheldon Fogelman, former President of Louise Wise Services.

<sup>1</sup> I do highly recommend Segal’s other books as well, especially the award-winning *Born Together-Reared Apart: The Landmark Minnesota Twin Study* (Segal, 2012), her more scholarly yet still very readable *Entwined Lives: Twins and What They Tell Us About Human Behavior* (Segal, 1999), and the fascinating *Twin Mythconceptions: False Beliefs, Fables, and Facts about Twins* (Segal, 2017) ... never mind, just read all her books.

<sup>2</sup> Throughout the current review, the phrases *twin* or *twin set* will be meant to also include triplets.

nature-nurture debate.<sup>3</sup> Integral to the study, Drs. Bernard and Neubauer argued, was that the true reason for the study had to remain a complete secret – neither the twins nor their adoptive families were to be told of the separation or even the existence of the other twin.<sup>4</sup>

In the first chapter, Segal provides some general information about twin studies and the underlying logic; readers unfamiliar with why twins are so vital to understanding any outcome of interest will find some new information here. However, the coverage is relatively minimal and other books of Segal's are more in-depth in this regard. Perhaps the key section in the first chapter is the discussion of twin relationships. A common thread throughout the entire book is the unique connection that twins seem to have and how severance of that connection can be so jarring and have potential long-term emotional effects. Here and elsewhere in the book, Segal draws on both scientific data and her personal experience as a researcher on the Minnesota Study of Twins Reared Apart (MISTRA) to describe the firsthand experience of reuniting twins. Segal also reminds the reader that studies such as the MISTRA did not engage in the unethical practices used in the LWS-CDC study where active separation of twins took place for the benefit of the study. Segal concludes the chapter with a note of the importance of knowing about unethical and morally questionable twin studies to prevent similar wrongdoings from every occurring again, a point repeated throughout the book.

In Chapter 2, Segal provides an in-depth coverage of the LWS adoption agency and the two main figureheads of the LWS-CDC, Drs. Bernard and Neubauer. The histories outlined in the chapter provide an important illustration of the humanitarian side of the adoption agency, Bernard, and Neubauer. The principle of charity that Segal applies to the entire endeavor is evident here and elsewhere in the book as she takes pains to ensure that the key players aren't all painted as completely evil villains. This portrayal is the reason I selected the direct quote from the book, stated by someone familiar with the study, for use in the title of this review. Nonetheless, the discussion in the chapter illuminates the highly dubious foundation of Dr. Bernard's claim that twins should be separated when placed in adoption. We also learn in this chapter the conditions to which adoptive families agreed to obtain their adopted child: inclusion in a "developmental study" where researchers would periodically visit the family's home to test the children. As noted above, the adoptive families were not told about their child's twin nor the true reason for the study. Segal also outlines in this chapter and elsewhere the extent to which secrecy was a baked-in component of the LWS-CDC study. Initially the secrecy appeared to be for the integrity of the study, but later Segal suggests that it was also to protect the adoption agency and the lead researchers from potential legal or civil liability. After providing further detail on Dr. Neubauer, including a personal meeting Segal had with him in 2004, she describes the closure of the LWS and the transfer of its records, a topic which is taken up again in later chapters.

Chapter 3 focuses on the methodology of the LWS-CDC study, though the exact details are not completely available due to the sealed records held at both Columbia and Yale universities. Nonetheless, thanks to Segal's intrepid detective work the chapter is still incredibly thorough and informative. This chapter includes some further information about the process of separating the twins, the extent to which birth mothers did or did not know how the twins would be placed, potential efforts by Dr. Neubauer to recruit study participants from other adoption agencies (with the same separation protocol), and the strategies used for placement of the adopted twins. One incredibly odd aspect of the LWS-CDC

study was despite Dr. Bernard's claim that separation of the twins was in the best interest of the children, the twins included in the study were all placed with families who already had a child in the home. The researchers felt that having an older sibling in the home would protect the *separated twin* against potential drawbacks of being an only child. The irony of this requirement is dumbfounding.

Having laid the foundational information about the LWS adoption agency and the LWS-CDC study, Chapter 4 introduces the first set of separated twins. Each chapter that describes the life history of the twin sets is a fascinating deep dive into a true human interest story. Despite the variability in terms of individual circumstances for each separated twin set, there was a relatively common sequence of events from curiosity about biological relatives, to unexpected discovery of a twin (either by chance or from active searching), to eventual discovery, and consistently, elation at meeting each other and easing into a close relationship. Segal notes the easy relationship formation between the separated twins was consistent in the MISTRA as well and likely due to the genetically influenced behavioral, psychological, and physical traits shared between the siblings. Another common thread in the stories that Segal highlights is the reaction of the twins and their adoptive families to the LWS-CDC study: the twins were typically resentful, angered, hurt, and outraged that they had been separated, but happy to have found their co-twin. Additionally, despite Dr. Bernard's claim that twins would be too much of a burden for the adopting parents, a common response to the discovery of a twin by the adoptive parents was "We would have happily adopted both". Indeed, there were even some parents who *specifically wanted to adopt twins*.

Attempting to summarize the different chapters that include the detailed life history accounts of the separated twins would be a disservice to Segal's book, and more importantly, the twins themselves. However, each of these chapters includes some incredible information that only adds layer upon layers of intrigue to the overall fascinating story. For example, the first set described in Chapter 4 – Tim and Illene – were to be interviewed by CBS and have their reunion recorded live until one of the twins backed out at the last minute.<sup>5</sup> The story of Kathy and Betsy outlined in Chapter 5 includes details regarding the twins' troubled mental health history, something they later learned was a trait they both shared with their birth mother. These twins were also to be featured on CBS's *Sixty Minutes* but the interviews were not aired, potentially due to one of the twin's alleged suicide. Here and elsewhere with other separated twins' stories, Segal (as well as families of the twins) speculate on the counterfactual: if the twins had been kept together, could their relationship have acted as a protective factor against their inherited mental health conditions?

More incredible details are provided about other twins, such as in Chapter 7's coverage of separated twins Anne and Susan whose status as twins surreptitiously became known to their respective adoptive families when the children were about six or seven years old. However, the adoptive families were warned by LWS to keep this information a secret as it might be damaging to the children. Incredibly, the families did keep this information from their respective child for 10 years! When the twins did find out, the families were understandably struck with guilt. In Chapter 8 we learn of separated twins Melanie and Ellen whose eventual reunion was ignited by an aunt of Ellen's encountering Melanie, who

<sup>3</sup> Thanks to a mountain of evidence collected from other, far more ethically conducted twin studies, there is no more nature-nurture debate: any outcome associated with the human condition is a result of both, though to varying degrees.

<sup>4</sup> As Segal discusses, there are some open questions concerning whether the study followed the separation policy or was initiated in conjunction with the policy. Either way, a foundational aspect of the study was reliance on the separation of twins placed by LWS.

<sup>5</sup> Included in Chapter 4 is a digression into a phenomenon known in the adoption community: *genetic sexual attraction*. Segal defines the construct as "a desire for close physical contact with a separated relative that may escalate into feelings of sexual desire" (pg.67). Readers of this journal will be familiar with the process of assortative mating (preference for mating partners who possess similar behavioral and physical traits). After some review of actual cases of separated twins and other relatives later unknowingly forming romantic and sexual partnerships, Segal speculates that perhaps some separated twins eventually did form such relationships. After all, all the adoptees were placed in the New York area and chance meetings of twins were documented. The discussion adds yet another unforeseen potential consequence to the actions of those associated with the LWS-CDC study.

was a hostess at an IHOP. As Segal notes at the beginning of the chapter, “Extraordinary things sometimes happen in ordinary places” (pg. 135). Chapter 9 describes separated twins Howard and Doug, whose information Segal primarily obtained during the 2000 edition of the annual Twins Days Festival in Twinsburg, Ohio and via several phone calls. The collection of striking similarities between the two twins was numerous and included factors such as the year they married, coaching youth hockey, carrying their wallet in their front pocket, being in similar lines of employment, and a shared disdain for any type of condiment.

Chapter 10 includes a highly detailed account of the triplets featured in the film *Three Identical Strangers*. While the facts surrounding the triplets are entertaining in their own right, my favorite aspects of this chapter are Segal’s descriptions of her interest as an aspiring twin researcher upon learning about the triplets in the media, her early experiences at the MISTRA, and how the triplets were also associated with that study. Included in this discussion, and vital to the entire book, is Segal’s take on the questionable methods and practices that she learned about the LWS-CDC study (e.g., the methods were so atypical of twin-based research). As I noted earlier, Segal’s coverage of the triplets goes well beyond that seen in the film. Chapter 11 details the story of Sharon and Lisa, who were separated for adoption placement even after their birth mother requested that they stay together. Sharon later found her twin sister on Facebook in what may remain as the only truly good thing for which the platform is suited. As Segal outlines, Sharon and Lisa’s story unfortunately deviated from some of the other twins’ stories as they are now estranged. Segal speculates that part of the wedge between the twins could have resulted from the vastly different socioeconomic status of the respective adoptive families, a result of the LWS-CDC study protocol.

Chapter 14 describes the experiences of entertainment executive Justin Goldberg, an adoptee placed by the LWS who suspected he was a member of a separated twin set after his daughter spotted a doppelgänger at a local market.<sup>6</sup> Incredibly, Justin also happened upon a striking doppelgänger of his adoptive sister Julie. These stories relate to one of the concerns that researchers in the LWS-CDC had about going public with the separation policy: all adoptees would then think they were a separated twin. Chapter 15 details the story of Paula and Elyse, separated twins who themselves composed a book based on their experiences (*Identical Strangers*). Paula and Elyse were actually dropped from the LWS-CDC study due to a four month difference in their respective adoption placements and subsequent drastic weight difference in infancy. Segal notes that dropping the twins was “poor science” (pg. 272) as it removed informative data relevant to the apparent research questions of the study. Throughout the book, I was stuck by several of the poor methodological decisions made by the LWS-CDC researchers (aside, of course, from the clearly unethical decision to separate the twins in the first place). In Chapter 16 the rather sad story of separated twins Paula and Marjorie is detailed. Paula’s efforts to find her sister after learning about her twin status resulted in the knowledge that Marjorie, someone who had a long history of psychiatric illness, had committed suicide over a decade earlier. Segal notes that there were three suicides among the separated twins, or 14.3% of those involved in the LWS-CDC study (compared to rates of less than 1% among men and women in the general population around that time). Chapter 17 details the story of separated fraternal twins Michele and Allison who were the subject of a short film directed by, Wardle (Wardle, 2018b) the same director of *Three Identical Strangers*. Watching the film online<sup>7</sup> after reading this chapter brought tears to my eyes and really highlighted the powerful emotions tied to these reunions that I read throughout the book.

<sup>6</sup> For a fascinating study using unrelated look-alikes conducted by (Segal and colleagues, 2013) see: Segal, N. L., Graham, J. L., & Ettinger, U. (2013). Unrelated look-alikes: Replicated study of personality similarity and qualitative findings on social relatedness. *Personality and Individual Differences*, 55, 169–174.

<sup>7</sup> <https://www.theatlantic.com/video/index/571867/two-identical-strangers/>

Along with chapters 12 and 13 that examine the limited data published from the LWS-CDC study (primarily, it would appear, due to the lack of informed consent for participation in the study and fear of legal backlash), the final three chapters of the book discuss the controversy associated with the study. These chapters offer some fascinating discussions relevant to a wide range of scientific endeavors that involve the use of human subjects. Chapter 18 provides a comprehensive overview of a letter of protest about the film *Three Identical Strangers* and Segal’s point-by-point rebuttal of the main claims made in the letter (as well as the revelation that some of the signatories of the letter hadn’t even seen the film!). Chapter 19 includes an informative discussion of the professional standards that appeared to have been ignored by the LWS-CDC researchers. Important in this discussion is that Segal provides her views on the study as informed by her extensive research *and* after consultation with several ethicists and legal experts. Those of us who conduct human-subjects research will recognize much of the historical foundations to today’s IRBs described in this chapter. Segal also addresses whether the data from the study should ever be published and offers her final judgement of the two main characters in the entire affair, Drs. Bernard and Neubauer. The final chapter, Chapter 20, provides the overall summary of the various key topics associated with the LWS-CDC study. In the end, we’re supplied with solid evidence that the study was an unconscionable endeavor that really didn’t even sufficiently address its primary aims. Segal concludes with an engrossing discussion about to whom the archived data belongs and questions why the data and other study information has been sealed for such an inordinately long time (until 2065). Segal’s last sentence of the book is an excellent and pithy summary: the LWS-CDC study “remains a great example of how not to do research” (pg. 390).

An incredible story requires an incredible storyteller, and Segal completely delivers. She is uniquely suited to tell this story an informed manner as she can speak to the overall science and methodology of twin studies. Perhaps more importantly, she also possesses the experience and care to properly elucidate and contextualize the multitude of stories surrounding the LWS-CDC study – especially those of the twins and their families. This book is a must-read not only for those interested in the etiologies of the human condition, but also for any researcher or student of psychology and human development. I’m even going to get a copy for my mom.

#### Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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