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Children's Near-Death Experiences: A Narrative Review and Future Directions for Investigating Near-Death Experiences With Children

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In comparison to adults, little is known about children's near-death experiences (NDEs). A review of the literature shows a scarcity of studies that directly involve children and an absence of direction for this area of work. This presents challenges for researchers who want to develop studies with children and generate more knowledge around the NDE. From a phenomenological perspective, children may be a crucial cohort for the investigation of consciousness at the time of death and they should be included more in fields such as NDE and Consciousness studies. This article aims to address this paucity in evidence by performing a literature review of studies on children's NDEs and proposes some future directions for involving children in near-death research.

Keywords: children, consciousness, literature review, near-death experiences, future directions

Advances in critical care medicine, resuscitation, and neuroscience have provided important scientific insights into the pathophysiological processes of death during the postmortem period (Parnia et al., 2022). Reports of rich conscious experiences during the postmortem period, defined as near-death experiences (NDEs), have been subject to extensive investigation, informing how we understand the human brain, mind, and consciousness in relation to death (Greyson, 2003; Parnia et al., 2001; Sartori et al., 2006; van Lommel et al., 2001). NDEs can occur when an individual is in a medical crisis or near death, appearing to involve an awareness of a reality beyond one's physical condition (Pehlivanova et al., 2025). These subjective experiences are mainly positive, with rarer negative experiences reported (Greyson & Evans Bush, 1992). NDEs are identified across many critical clinical circumstances—such as cardiac arrest, myocardial infarction, coma, or asphyxia and in patients with serious but immediately life threatening diseases (van Lommel et al., 2001).

Results from several prospective studies on NDEs (Greyson, 2003; Parnia et al., 2001; Sartori et al., 2006; van Lommel et al., 2001), show patients reporting phenomena such as deep peace, unconditional love, sensations of leaving the body, perceptions of moving through tunnels, meeting with entities, a life review—and expose the transformational effects for individuals following

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Data, analytic methods, and study materials from their original study are not made publicly available to other researchers due to the sensitive nature of the topic and the vulnerable group involved.

The authors have no conflicts of interests to declare. The authors thank the children and families who participated in their pilot study referenced within the article.

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their NDE. These phenomena are defined as core features of NDEs, first identified by Moody (1978) and subsequently by Greyson (1983) through the development of a well-used NDE scale. These notable studies recognize how NDEs surpass the explanatory power of current models of consciousness, challenging dominant physicalist/materialist explanations for consciousness as emergent from the brain (Parnia & Fenwick, 2002; Sartori et al., 2006; van Lommel, 2011). Biological models of NDEs suggest them to primarily be a result of apraxia (lack of oxygen to the brain), anoxia of the retina, and blockages of N-methyl-D-aspartate receptors in the brain (Blackmore & Troscianko, 1989; Jansen, 2013). Some scientists widen the scope of explanation for NDEs, suggesting mind may be nonlocal to the brain, warranting wider ontological explanations of the nature of consciousness to explain NDEs (Greyson, 2010; Parnia & Fenwick, 2002; Sartori et al., 2006; van Lommel, 2019). For example, reductionist explanations cannot account for some of the features of NDEs, such as spontaneous healing, veridical perceptions, and sight that is reported by visually impaired patients (Fenwick, 2012).

Although NDEs are usually associated with clinical death, this association remains controversial, with NDE-type experiences reported, for example, during life threating situations when the physical body is not in danger (Evrard et al., 2019). Parnia et al. (2022) argued that these NDE-type experiences should be demarcated from authentic NDEs to support the systematic study of NDEs. Studies in anthropology show how NDEs are recorded around the world and throughout history, with some researchers arguing for cultural differences in the phenomenology associated with NDEs (Shushan, 2013, 2025). The "subjective nature and absence of a frame of reference for this ineffable experience leads to individual, cultural, and religious factors determining the vocabulary used to describe and interpret this experience" (van Lommel, 2019, p. 8). The sparse research in this area warrants more information and systematic comparisons of NDEs across various cultural contexts. NDEs continue to remain opaque to our full understanding (Cardeña, 2021).

What may be agreed upon are the transformational effects caused by NDEs (Long & Woollacott, 2024; Pehlivanova et al., 2025). Some of the aftereffects of NDEs that are most often reported include increases in spiritual attitudes, concern for others, and sense of meaning in life, as well as decreases in the fear of death (Pehlivanova et al., 2025). While NDEs contain positive dimensions such as peace and love, they can also bring distress, as experiencers may struggle to communicate and integrate their NDE, especially if it challenges their worldviews (Pehlivanova et al., 2025).

Where Are the Children?

Most claims made about NDEs are based on extensive research with adults, with children left on the margins of the field, despite the value of children's involvement (Atwater, 2007; Morse, 1983, Morse et al., 1985, 1986; Sutherland, 2009; Thomas & O'Connor, 2024, 2025). Parnia et al. (2022), published a valuable set of guidelines and standards "for the study of death and recall experiences of death." Reference to children's NDEs is minimal, found in recommendation 11, stating "Children have described similar recalled experiences to adults, often using children's terminology and during play, sometimes over months. However, studies in this area are limited to case reports and case series" (p. 21). We agree that studies in children's NDEs are extremely limited compared with adults, and children need to be lifted out of the footnotes of the field to understand just how similar/different their NDEs are to adults.

Parnia et al. (2022) importantly considered NDEs within the wider context of understanding cognitive experiences and psychological outcomes related to "post intensive care syndrome" (PICs). Our own studies that investigate NDEs with children are situated within the wider context of Pediatric Post Intensive Care Syndrome (PICs-p—see Thomas & O'Connor, 2024, 2025). How we research NDEs with children will be different to how we might study them with adults. Atwater (2007) importantly argued, adult-orientated research models inform NDE research with children, "despite how children express themselves differently from adults, and respond to the aftereffects in ways often at variance to that of adults" (p. 51). Parnia et al.'s argument for distinguishing NDEs from other experiences during coma, dreams, and intensive care unit delirium is especially important for investigating NDEs with children. For example, children's NDEs in paediatric post intensive care (PICU) are at risk of falling under definitions of delirium before these experiences are explored with children (Thomas & O'Connor, 2024). NDEs are different to the

chaotic and often negative ketamine-induced experiences for children (Morse et al., 1985, 1986; van Lommel, 2011). The criteria for identifying adult NDEs, may need adaption for children

> the specificity of its recalled themes and particular narrative, as well as its overall effect and impact on the individual, including ineffability and transcendence leading to positivity and transformation, as evidenced by seeking greater meaning to life and beyond conventional measures of success. (Parnia et al., 2022, p. 22)

For example, research from Morse et al. (1985, 1986) and our own recent study (Thomas & O'Connor, 2024) found that children did not report life reviews and shifts in life priorities may not be a marker of transformation for children. Children may not recall themes nor construct narratives in the same ways that adults do. Differences between children's developing brains, how they cognize and represent experience and transformational impacts are further considerations. Primary forms of cognition in children are prelinguistic, timeless, and symbolic and can persist into adult life through dreams, "long recognized in psychedelic drug states" (Fischman, 2019, p. 9). Neuroscientist, Alison Gopnik, described points of convergence between activity in the default mode network of younger children and adult psychedelic users (Fischman, 2019; Thomas, 2022b). While little is understood about the maturation of the default mode network from childhood to adulthood (Supekar et al., 2010), differences and similarities between children and adults brain function should be considered in the development of neural models to explain NDEs (Lake, 2017). Children as a research population can contribute to ontological debates over the nature of consciousness, and relationships between the mind and brain (Thomas, 2022c, 2023). Recent studies with children suggest they cognize their selves and worlds through nonlocal (extra sensory) phenomena and states of consciousness (Thomas, 2022a, 2022b, 2022c, 2023)—showing children to be a valuable research population for the study of consciousness.

Despite these potential differences, children are shown to report some of the core features of authentic NDEs (Bush, 1983; Morse, 1983; Morse et al., 1989; Sutherland, 1991, 2009; Thomas & O'Connor, 2024). Where adults may already be exposed to the core elements of NDEs (peace, tunnels, light, etc.) through social media, movies and wider access to research, children are less likely to know about them (Schröter-Kunhardt, 1993; Thomas & O'Connor, 2024). Although less exposed to NDE knowledge, children can report moving through tunnels toward a light, leaving their bodies and meeting other entities. Their accounts "are often informative simply because they repeat exactly what they see without great concern over the rational interpretation of their observations" (Bonenfant, 2001; p. 95). As Schröter-Kunhardt (1993) noted, "children who have never heard about NDEs have similarly structured NDEs. Even if the children have learned from certain (religious) expectations of their parents, their NDEs do not correspond to their parents' beliefs" (p. 230). We feel this makes children a rather reliable research population.

Importantly, children can be deeply impacted by their NDEs making integration into their life worlds challenging (Thomas & O'Connor, 2024). Bell et al. (2010) identified the absence of NDE data among school age children and estimated that one or more near-death experiencers (NDErs) exist in nearly every school in the U.S. School counselors are more likely to encounter NDErs in conversations with students (Bell et al., 2010). Adams et al. (2025) highlighted a gap in death education literature, arguing that to increase curriculum relevance in schools, we need to move beyond considering children's beliefs about life after death to also acknowledge their experiences of it, such as their NDEs. The scarcity of literature with the absence of any future directions for investigating NDEs with children makes this area challenging. The article aims to address missing children in NDE studies, starting with a narrative review of past studies, then moving on to a discussion around potential future directions for investigating NDEs with children.

Children's NDE Research 1983–2024

The earliest clinical NDE studies directly involving children can be traced back to the eighties, with the pioneering work of Morse et al. (1983, 1985, 1986). Morse investigated children's NDEs through three significant studies (Morse, 1983, 1994; Morse et al., 1986). Morse (1983) began with a simple case study of a 7-year-old child who had nearly drowned. Through this case study, Morse highlighted the core features of NDEs as euphoric states, out-of-body states, darkness, tunnels, and light, building on the earlier work of Moody (1978). While Moody (1978) focused on adult NDEs, Morse (1983) argued for more

awareness of children's NDEs in pediatrics and how counseling may be needed for children who have survived near-fatal events. Morse's case study developed into a clinical study and in 1985, Morse et al. published a preliminary report in the American Journal of Diseases in Children, on "NDEs in a Pediatric Population (1985)." The report brought attention to the numerous accounts of unique psychological states associated with near fatal events of adults, noting the absence of any studies with children on the phenomenon of NDEs (Morse et al., 1985).

In their report, Morse et al. (1985) included the subjective experiences of four children (out of seven) who had survived cardiac arrest. The study protocol involved screening the medical records of 42 patients, aged 3–16 years hospitalized in PICU from 1978 to 1983, with the study population organized into two groups. The first group included seven children identified as being critically ill and having significant mortality. The second group included six children, defined as seriously ill but unlikely to have significant mortality. All interviews with children were conducted 2 months after discharge from the hospital, with children and parents interviewed together. Children responded to open-ended questions about their hospitalization, while demographic, cultural, and medical data were collected (Morse et al., 1985). Four out of seven children reported some of the core features of NDEs, with Morse et al. reporting that only children who had suffered cardiac arrest, coma associated with trauma from drowning or hyperosmolar, reported NDEs. Children in PICU for epiglottis heart surgery, Guillain–Barre syndrome, had mechanical ventilation and narcotics, did not report memories in the postmortem period.

Morse et al.'s (1986) third study built on the preliminary study "Childhood Near-Death Experiences" and was published by Morse et al. the following year (1986). The article describes results from a second study with 11 children ages 3–18 years. Morse et al. recruited patients who had survived critical illnesses that included cardiac arrest and comas. They also included a control group of 29 age-matched survivors of illnesses that required intubation and narcotics; to assess the role postcardiac trauma/psychosis may play in any reports of NDEs. In the critically ill group ($n = 11$), seven children reported memories when unconscious. In the control group ($n = 19$), no children reported any memories. The children who reported memories described core features of NDEs as identified in adult populations. Children reported being out of their bodies, entering darkness, being in a tunnel and making decisions to return to their bodies. Two children also reported unpleasant experiences. Morse (1994) and Morse et al. (1986) suggested that narcotics such as ketamine (used extensively in PICU settings) are unlikely to cause NDE experiences in children. Morse et al. (1989), published a "neurophysiologic explanatory model" for NDEs, suggesting that the core NDE is genetically imprinted and triggered by serotonergic pathways.

Later articles by Morse (1994) claim NDEs to be spiritual events of cardiac arrest and coma survivors. These are events, argues Morse that are invaluable for empowering dying patients and their families to understand death and heal grief. Morse reports on a combined retrospective/prospective case control study of childhood NDEs, detailing the same mixed methods approach (see Table 1) with larger numbers of children. Patients aged between 6 and 16 years were either retrospectively identified from chart interviews taken between 1975 and 1992 ($n = 16$) or prospectively identified from 1985 to 1992 ($n = 10$). Children were organized into Group 1 critically ill children surviving medical conditions with a greater than 10% chance of survival ($n = 26$) and Group 2, a control group of children admitted to PICU, intubated but not expected to die ($n = 121$). Results from the prospective/retrospective study (Morse, 1994) were similar with previous studies (Morse, 1983; Morse et al., 1985, 1986) showing children to report the core features of near-death experiences, with 22 out of 26 children describing memories of being clinically dead and alert while in a coma. Morse reports on other features of children's NDEs such as viewing medical procedures, sensations of being dead but conscious, entering a sidewalk or staircase, seeing relatives, and comforting entities and images.

Morse's research catalyzed an appetite for children's NDEs across the eighties and nineties, with subsequent researchers using the data to compare differences and similarities between children's and adults' NDEs (Bush, 1983; Serdahely, 1991). Rather than clinical studies with larger numbers of children, researchers oriented toward reviewing written accounts (by parents or adults reflecting on childhood experiences) and single case studies to investigate children's NDEs. Reviews focused on written letters, for example, seen in the work of Bush (1983). In "The Near-Death Experience of

Table 1
Studies of Note Between 1983 and 2024 Directly Involving Children—Procedure, Methods and Results

Author	Studies' procedure and participant	Method	Key result
Morse (1983)	Case report on a 7-year-old child's NDE.	Medical and biographical details included family background, religious influences (practicing Mormon family) and description of the near-drowning event Follow-up interviews and drawing pictures of the experience	The child showed short-term memory that was resolved after 4 weeks On follow-up interviews, the child began to described memories of meeting "the heavenly father." The child describes being in a dark tunnel and feeling scared and immobile. An entity the child names "Elizabeth" came and the tunnel became bright. Elizabeth described as tall with bright yellow hair. The child walked with Elizabeth to heaven which was lots of fun, bright, had lots of flowers, and a border around it. The child met deceased family members and was given a choice to return.
Morse (1994) and Morse et al. (1985, 1986)	Prospective/retrospective case control clinical studies NDE group ($n = 26$) Control group ($n = 121$) Children ages 3–18 years	Structured interviews. 16-item questionnaires; 19-item yes/no questionnaires Drawing pictures of their experiences	Twenty two out of twenty six children report NDE-type experiences Children report core features as identified in adult population (out of body experiences, children need support following NDEs) Pictures show recurring imagery such as tunnels
Atwater (2003)	Difficult to assess procedures, approximately 277 children directly involved in research	Interviews, questionnaires, and drawing pictures	Atwater coded different types of NDEs in children: typical or pleasant, unpleasant or hellish, transcendent or mystical, void or nothingness, and collective or out of body experience awareness
Lopez et al. (2006)	Spontaneous reporting By a child in an anesthesia study. Case study report containing medical details and a description of interviews	Psychologist interviewed the child using questions related to his reported experience	The child reported being aware of sounds and touch during anesthesia. The child then recounted an NDE he had during an earlier hospital admission. The child describes leaving his body and moving through a tunnel toward a light
Herzog and Herin (1985)	Two patient case studies involving young children aged 3 months/6 years & 7 years Description of medical information provided and overview of what the two children experienced. The youngest child's	Spontaneous reporting of children recorded by parents and clinicians on site.	The case study involving the youngest child (6 months/3.5 years) demonstrates nonverbal representation of the experience as the child would not enter the tunnels at the play center. A few months later, when

(*table continues*)

Table 1 (*continued*)

Author	Studies' procedure and participant	Method	Key result
	experience is reported through the mother. The older child's account is self-reported.		the mother is trying to explain a relative's impending death to the child, the child asks whether Grandma will go through the tunnel. The older child (age 7 years) told his parents and clinicians that he had died the previous evening (during a medical crisis) and witnessed doctors hitting him on the chest.
Sutherland (1991)	Interviewed 18 children about their NDEs for book publication (title). Presented as case narratives	Open-ended interviews, child-friendly adaptions (i.e., sitting on floor with children).	Children's NDEs contain core features similar with adults; prelinguistic children may know more than they can say, profound after affects for children re developmental and social; transformative experiences for children
Thomas and O'Connor (2024, 2025)	Children admitted to intensive care unit ages 4–16 years suffering cardiac arrest and resuscitation; 14 children recruited, only seven could participate (as among the other seven, two children died and five were too ill to participate. Interviews conducted 2 weeks after children died and were resuscitated. Next phase of ongoing study will use prospective sampling 12 months following initial interview on paediatric post intensive care	Interviews using open-ended questions; arts-based research methods, small world play research methods; co-interpretation with children, interviews with parents about their child's experience; evaluation with children and families of the research process	Four out of seven children report features of NDE with one younger child (age 6) having no memories but drew a spiral. Children reported moving through tunnels, watching their operations from the ceiling, visiting celestial landscapes, bedside visions, bilocation, peace, love, and a feeling of unity with everything.

Note. This table highlights protocols, participants, methods applied by researchers, and results, from several key studies conducted between 1983 and 2024. NDE = near-death experiences.

Children: Shades of the prison house reopening," Bush reviewed accounts of NDEs of children collated from the International Association for Near Death Studies archives. Bush reviews fifteen retrospective accounts of childhood NDEs remembered by adults (between 11 and 65 years later) and two accounts by contact with two mothers about their child's NDE experience. One experience was recalled under hypnosis, while the remaining sixteen were recalled through memory. Bush recognizes the absence of abundant data and offers no interpretation of the NDEs. Rather, Bush develops an argument for similarities between children's and adults' NDEs and suggests that cultural conditioning is not a primary determinant of NDE content.

Spontaneous reports by children about their NDEs have been captured in clinical studies not initially concerned with NDEs. For example, Lopez et al. (2006) reported that within the context of a prospective study designed to evaluate the incidence of awareness with intraoperative recall in children undergoing general anesthesia, a 15-year-old boy reported hearing music, the voices of doctors, and experienced touch. The child also provided a retrospective account of an NDE he experienced in a prior admission to the hospital. The child describes a sensation of leaving his body and floating over his physical body, moving through a dark tunnel, toward a light that "did not hurt my eyes" (Lopez et al., 2006).

In "Trailing Clouds of Glory: The near-death experiences of western children and teenagers", Cherie Sutherland (2009) highlighted that by 2006, several hundred child NDErs[1] were mentioned in the literature, yet as Sutherland highlights, the lack of recorded research rendered them of little use to inform further research. Sutherland point is a significant one. The literature review shows how many of the articles on children's NDEs do not clearly detail recording processes, systematic cases, numbers of children directly involved, children's ages, and consistency in using pseudonyms for the same cases used across different articles and reports. Perhaps, the use of adult-centric methodologies has contributed to smaller numbers of children themselves being part of NDE studies (Atwater, 2007; Thomas & O'Connor, 2024). Researchers have argued for the indistinguishable reporting of children's accounts and adults' retrospective childhood accounts (Bush, 1983; Serdahely, 1991) but these claims are based on the involvement of very small numbers of children. More research is needed in this area (Thomas & O'Connor, 2024, 2025).

In Thomas and O'Connor (2024, 2025), we report on a pilot study, presented as a case series, that aimed to identify the general experiences of PICU (environment, clinicians, procedures, etc.) and PICS-p for children. We also investigated any unusual experiences that may occur when children are close to death. Four out of seven children reported NDEs during cardiac arrest, in creative research interviews conducted 2 weeks after children had died and been resuscitated (see Thomas & O'Connor, 2024). Children (ages 4–18 years) reported unsolicited NDE-type experiences that included out of body experiences, bright lights, bedside entity visions, bilocation, and visiting celestial places (Thomas & O'Connor, 2024, 2025).

Following a rigorous ethics process, all children and their parents provided informed consent to take part. Recruitment started with screening potential participants. The total number of children who were initially screened as potential recruits was fourteen. However, during further assessment seven children were excluded due to significant brain damage rendering the child unable to comprehend the study aim. Seven children and families consented to participate, meaning all eligible children consented to take part. Females represented five (71%). The commonest cause for admission to intensive care was due to an underlying heart defect, which accounted for three (43%) participants. The median age was 12 years old and the average length of stay in intensive care was 19 days (±10 *SD*). The median number of interview episodes per participant was two and the median length of interviews were 24 min (see Thomas & O'Connor, 2024 for further details on participants and methodology).

To effectively involve children in the study, a bedside play area was assembled, providing participants with choices over research methods, which included paints and crayons, small world play, and a camera that could also function as a camcorder. The time of the research session was prebooked with the family and nursing team, the length of the session depended on the child (i.e., tiredness, willingness to participate, etc.). The researchers framed creative interviews with a set of general questions related to the child's stay in intensive care. A second set of questions were

[1] It is important to note that most child NDErs would have been adults giving retrospective accounts of their childhood NDEs.

used with children to explore any experiences which may have occurred during cardiac arrest, coma, or medical procedures, that included, What happened before you fell asleep/lost consciousness? What happened when you woke up? What happened in between falling asleep/losing consciousness and waking up? Interviews with participants were recorded using a video recorder, enabling information from research methods, such as play, to be documented to allow researchers to focus on the research activity with the child.

We approached data analysis through co-interpretation with children. Co-interpretation of data is a form of "member-checking" for adult researchers to test their interpretations against children's meanings and insights—and can avoid the limitations inherent when analyzing data without participants' insights (Tay-Lim & Lim, 2013). In the pilot study, co-interpretation with children about their experiences happened during drawing and painting or play (see Thomas & O'Connor, for details on additional analytical frameworks applied). Investigating NDEs with children in PICU settings is challenging, warranting patience and time, rapport development, multiple interviews, and a preparedness to be responsive to what children report (Thomas & O'Connor, 2024, 2025). As we move into the second phase of our study, we aim to include a higher number of children and include a prospective dimension interviewing children again 12 months after their PICU discharge. From our pilot study and review results, we will also include the Child and Adolescent Near–Death Experience Inventory Scale (see Thomas & O'Connor, 2026) to identify the features of children's NDEs and support systematic data collection.

While adults' childhood memories of NDEs may share similar linguistic features and possess powerful emotional validity, we argue that children's accounts, as children, hold epistemological authority over their experiences. As highlighted earlier, while social conditioning alone cannot explain the nature of NDEs (but may perhaps influence some of the noncore content), children are less likely to have preconceived knowledge about these core features, making them more likely than adults to report direct experiences. Like Morse's (1983) case study report, children assign a subjective reality to their NDEs. These are big and transformative experiences that as research shows, children remember into adulthood (Bush, 1983; Sutherland, 1991). Our arguments are based on the importance of not sidelining children themselves in favor of adult retrospective accounts. If adults do retain (as reported) nonordinary memories of their NDEs, involving children in the first instance could help evidence these theories.

To summarize, there is a paucity of research directly involving children, with more retrospective accounts by adults than accounts by children themselves, showing low numbers of children directly involved in studies about their own living and dying experiences. Information on appropriate and systematic methods, and standards for involving children in NDE research is sparse. While the focus on historical studies is largely concerned with comparative data (between children and adult NDEs), less attention has been given to the implications for integration and continuous well-being for children who have NDEs. The research to date suggests that children and adults share some core features of NDEs (Greyson, 1983), as Atwater (2007) reminded us, their experiences may differ in terms of representing them, thinking about them and integrating them. What the review highlights is the need for more systematic research involving children in the field of near-death studies.

Reviewing Methods: Directly Involving Children in NDE Research

Through our own investigations with children and their NDEs, we were already aware of the scarcity of literature in this area (Thomas & O'Connor, 2024, 2025). A recent systematic analysis of NDE studies (adults and children) and case reports between 1885 and 2022 by Hashemi et al. (2023), identified 2,404 articles. Following exclusion of articles that did not fit their review criteria (see Hashemi et al., 2023), 152 articles were reviewed with results showing 460 NDEr's that included men ($n = 126$), women ($n = 150$), N/C ($n = 162$), and only ($n = 22$) children. To support the development of future standards and protocols for investigating NDEs with children, we conducted a review of methods applied through case studies, prospective, retrospective, and qualitative studies on children's NDEs. Articles published between 1983 and 2024 were screened.

Eligibility Criteria

The inclusion criteria were (a) search field: title, (b) type of article: journal article, (c) language: English, and (d) years: 1980–2025.

Information Search and Search Strategy

The search process included empirical, qualitative and quantitative papers, retrospective and prospective case studies, as well as reviews, published in journals indexed in the Web of Science, Scopus, American Psychological Association PsycInfo, and PubMed databases, Annual Reviews, University of North Texas Digital library and Elton B Stevens Company. The following terms and their variants were included in the search strategy: Pediatric OR child AND "End of Life" OR "Near-Death Experience" OR "Out of Body Experiences" OR "Cardiac Death" OR "Brain Death" OR "Irreversible Coma."

Content Extraction

The main characteristics (authors, publication, year of publication, and type of work) were specified and a systematic analysis of the selected studies was performed to identify relevant data on the methodological (protocol) and analytical aspects for describing these experiences. Selection was based on the criteria that articles focus exclusively on children's NDEs and studies that involve children directly, rather than retrospective accounts from adults. Criteria for final selection included articles that contained a sound description of methodology. A total 30 articles where initially recovered. Due to the scarcity of literature on children's NDEs, researchers read and reviewed full articles to ensure criteria was fulfilled, so forth (see Table 1). From these 30 articles, eight were included based on directly involving children, sound and/or detailed methodology.

The tabled studies show research (to our knowledge) that directly involved children in NDE studies. Some studies provide more procedural details than others; therefore, we cannot include a total figure of children directly involved in NDE studies.

Core Features of NDEs

The tabled studies show similar results, with all studies showing children to report core features of NDEs such as moving through tunnels toward a light, darkness, peace, and love. While other researchers have reported lengthy, detailed and content-filled NDEs of children (Bush, 1983; Morse, 1983; Sutherland, 2009), some researchers show children to report basic, simple descriptions of NDEs by children (Lopez et al., 2006; Thomas & O'Connor, 2024). For example, the four children in our own study, reported nonchronological memories of the core elements (moving through "spirals," a "bright light," feeling "so peaceful," and feeling at "home"). Three children reported a loving darkness that held them, similar with a mother's womb. Only one child reported additional entities and visiting a celestial landscape, with two children reporting bilocation (the sense of being in two places at once)—see Thomas and O'Connor (2024).

Cultural Influences and Representation

In our own sample, we involved children from various religious and cultural backgrounds (Roma Gypsy, Muslim, and Secular). We did not detect any religious/cultural references in the reports of children. Unlike the child in Morse's (1983) case study who describes meeting the "heavenly father" (the child's family were practicing Mormons). With the data we currently have, it is difficult to understand to what extent, if any, children's NDEs are shaped by social/cultural influences. Sutherland (2009) suggested preverbal children may know more than they can report, identified through adult's retrospective accounts of their NDEs as infants and babies. In our own study (Thomas & O'Connor, 2024), one younger child (age 6 years) did not report any memories about her cardiac arrest. However, the child drew a spiral/tunnel structure when asked to draw something that may help any memories (Thomas & O'Connor, 2024). This is similar with Herzog and Herrin's (1985) report of a very young child who became critically ill and admitted to PICU at age 6 months. According to the child's mother, at a trip to a play center a few months later, the child refused to go through a tunnel. When the child was 3.5 years old, her mother tried to explain that her grandmother would soon die. The child responded by asking if grandmother would also go through the tunnel. Herzog and Herrin pay attention to the bodily/sensory semiosis displayed by the young child who refuses to go through the tunnel. Children can represent their extra sensory experiences (including NDEs) through sensory, playful, and material ways (Thomas, 2022a, 2022b, 2022c, 2023; Thomas & O'Connor, 2024)—that should count as important data.

Method

Most studies in the table use hybrid methodologies, for example, clinical studies with qualitative

and creative approaches embedded within them (Lopez et al., 2006; Morse et al., 1986; Thomas & O'Connor, 2024, 2025). Studies show variation in when and where children were interviewed. For example, we interviewed children relatively close to their cardiac arrest and resuscitation and conducted interviews on the PICU ward (Thomas & O'Connor, 2024). Some children could not remember while others had significant memories. Morse's (1985, 1986, 1994) interviews were conducted primarily in patients' homes, with no specific time range other than weeks to months after discharge, with two patients interviewed several years later (across the three studies identified). There is not enough data at this stage to assume what the best timeframe is to interview children following near-death events. Morse et al. (1985, 1986) used formal interview structures using open-ended questions that asked children about their memories while unconscious. Following interviews, Morse et al. used NDE scale-type questionnaires that required yes/no answers.

Multiple interviews with the same child were used in Lopez et al. (2006) and Morse (1983) and in Thomas and O'Connor, 2024. Multiple (and at times shorter) interviews can be beneficial for children and for data collection. For example, the child interviewed in Lopez et al. case study spontaneously remembered an NDE experience on an earlier admission to the hospital. In our own study, an older child (age 14 years) did not report any experience when suffering cardiac arrest in his first interview. In a second interview, we asked the child whether he had been in hospital before. The child suddenly remembered that in his previous heart bypass operation (at age 12 years), he experienced himself out of his body and aware of all the activities in the operating room. These studies show how shorter and multiple interviews can be beneficial for children who are still recovering from illness and for younger children who can become easily distracted (Thomas & O'Connor, 2025).

Children were also invited to draw pictures to help share their experiences in various studies. Using arts-based methods is shown to support children to share their NDEs. Atwater (2003), Morse (1983, 1985), Sutherland (1991), and Thomas and O'Connor (2024) used art methods, such as drawing techniques, to support children to represent their NDEs. Morse et al. (1989) noted recurring imagery such as tunnels, drawn by children trying to represent their NDEs. In our own study, we also noted the same recurrent imagery of spiral structures (Thomas & O'Connor, 2024, 2025). The same spirals drawn by children are also identified in general extra sensory experience research, depicting not just NDEs, but transcendental type experiences during crisis, while out in nature (Thomas, 2022a, 2025) or in hypnogogic states (Thomas, 2022c, 2023, 2025; Thomas & O'Connor, 2026). These are important data as they capture deep representations of altered states of consciousness and position arts-based research as an important approach for children in NDE studies.

Ethics

Ethical considerations are detailed in Thomas and O'Connor (2024), including informed consent procedures for children. Gaining child and parent informed consent before interviews is referenced in Morse et al. (1985, 1986). There are some similarities in procedures between Lopez et al. (2006), Morse (1994), Morse et al. (1985), and Thomas and O'Connor (2024, 2025). For example, both studies reported by Lopez et al. and Thomas and O' Connor adhered to strict safeguarding protocols, ensuring a psychologist was involved in the study. In the case of our own study (Thomas & O'Connor, 2024, 2025), the psychologist was in the background in case any child became traumatized by their experiences (we did not need to signpost any children in our study). For Lopez et al., the psychologist interviewed the child. It is unclear whether ethical considerations (such as informed consent procedures for children, parental consents and rolling consents) were applied in the remaining studies. Most studies recognized the importance for further research with children and the need to develop support for children who have NDEs.

Summary: Future Directions for Investigating NDEs Directly With Children

As early as 1983, Melvin Morse and Nancy Evans Bush were calling for more research on children's NDEs. In 2025, there are still minimal studies which investigate children's NDEs, directly involving children. The literature review, while sparse, highlights how children do report the core features of NDEs similar with those reported in adult populations (Atwater, 2003; Morse et al., 1985, 1986; Morse, 1983; Sutherland, 1991;

Thomas & O'Connor, 2024). Children, when directly involved, seem to report simple and core NDE elements that are significant for children (and their families). Children as less exposed to NDE knowledge could effectively contribute to studies that investigate states of consciousness near death. While children describe simple core experiences, these are significant and may be challenging for children to integrate. Children's NDEs need to be recognized and used to inform relevant support mechanisms for children and their families (Morse, 1983; Thomas & O'Connor, 2024, 2025). As NDEs are becoming a more accepted phenomenon in health settings, due to rigorous research with adults (Greyson, 1983, 1993, 2003; Parnia et al., 2001; van Lommel, 2011; van Lommel et al., 2001), it has become even more pressing to develop research with children. While claims are made about the similarities between children and adult NDEs, we currently do not have enough data from children to confirm this.

It is important to make the case for qualitative research as a valuable methodological approach for investigating subjective experiences, in fields which prioritize preexisting and formalized methods of scientific measurement. Measurement-based methods can exclude a range of knowledges and semiosis (ways to represent knowledge), such as those produced by children (Thomas & Durston, 2025). While clinical and quantitative approaches are important for generating systematic data on the nature of NDEs, NDEs are an area of enquiry that heavily relies on subjective data. For some time, the field of qualitative research has argued for the validity of subjectivity, especially in science concerned with subjective and living experiences (Letherby et al., 2012; Thomas & Durston, 2025). The blurred lines between subjectivity and objectivity are growing more apparent in approaches such as experimental research, with fields such as physics, for example, grappling with the hard problem of subjectivity (Goff & Moran, 2022). Approaches such as arts and play based research methods are recognized methodologies in fields such as childhood studies, education and health (Blaisdell et al., 2019). These are approaches that can support how we involve children in NDE studies, in ways that can generate data that measurement-based models cannot. Rather than seeing children's reports as mere anecdotes, a shift in how qualitative data is perceived is warranted. More prospective studies with children are needed to understand memories, impacts and integration of NDEs for children across the life course (see Thomas & O'Connor, 2026).

Importantly, investigating NDEs with children can support how we bridge the world of NDE research with service development and policy formation—especially in the areas of pediatrics, health, and well-being. With children, there are many barriers to overcome. General research with children in PICU is sparse, demonstrated through a review by Menzies et al. (2016) that highlighted the lack of research involving children in PICU. PICS-p, like NDEs, are defined in terms of adults experiences, not children's. Differences highlighted for PICS in children include dependence on the family and health recovery level (Woodruff & Choong, 2021) and exposure to death and dying (Manning et al., 2017). These differences can also be applied to NDEs and their after-effects in adults and children. Where unusual experiences are identified in PICS-p or intensive care stays for children, they are largely attributed to opiate-based medications, seen as delusions or delirium (Colville, 2008).

Having standards and protocols for investigating children's NDEs could inform how these areas are detangled and children supported (Thomas & O'Connor, 2026). NDEs and related extra sensory phenomena can have healing benefits for children. An example from our own study (Thomas & O'Connor, 2024) shows how one child's bedside vision supported his own recovery from three cardiac arrests and a double lung transplant. Identifying and harnessing the positive aspects of NDEs for children is another important area for future research. Future directions for involving children in the field of NDE research requires the ongoing development of standards and protocols that can support researchers working with children.

The review has identified further areas for research for investigating NDEs with children. These include establishing the features of children's NDEs and how children share them (narratives, play, through the body, sensory modes, etc.). Further research is needed to understand the impacts of NDEs on children as they develop into adulthood. Examining how any social, religious, and cultural influences may affect children's NDEs is another important area. More physiological data are also needed for investigating NDEs with children in hospital settings, including electrocardiogram, electroencephalogram, and other relevant medical records. An emerging area of research

mentions the use of highly sensitive photon detectors to study brain activity during NDEs. The use of random event generator machines in NDE research to detect nonphysical consciousness is another potential nonmainstream area of study, that requires validation through a longitudinal research program using sophisticated electroencephalographic and functional brain-imaging techniques with advanced data analysis methods (Lake, 2017; Peck et al., 2017). Having a more informed understanding of children's NDEs will support comparative studies (children and adults NDEs) and will better inform research into the nature of consciousness.

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