

## Discovering Misattributed Paternity After DNA Testing and its Impact on Psychological Well-Being and Identity Formation

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### ABSTRACT

*This study explored how discovering misattributed paternity in adulthood after commercial DNA testing impacts psychological well-being and identity formation. Thirty-three subjects participated in this phenomenological qualitative study. Eighteen had experienced misattributed paternity, while the other 15 subjects discovered misattributed paternity due to being donor conceived. Three fundamental themes emerged in both the misattributed group and donor-conceived group that could be perceived as the core themes are: (a) sadness, grief, and loss; (b) seeking connection and belonging; and (c) betrayal and anger. Other significant themes revealed by both groups included: Otherness, Curiosity, Relief and Comfort, Surprise, Acceptance, and Empathy and Rationalization. Additional themes also revealed by the donor-conceived group, but not revealed in the misattributed group are: (a) existential concerns, (b) self-assuredness, and (c) right to know and advocacy. Overall, findings in this study reveal unique experiences between both groups, suggesting the circumstances around conception and discovery vary depending on misattributed status.*

**KEYWORDS:** misattributed paternity, DNA testing, psychological well-being, identity, donor-conceived.

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Direct-to-consumer genetic testing kits have been making headline sales in the past several years. As of 2019, more than 26 million people had taken a commercial DNA test (Regalado, 2020). Currently, Ancestry.com is the leader in sales in the United States when it comes to the distribution of genetic testing kits, with 23andMe as the second-largest competitor (Regalado, 2018). Observing the interest that has arisen in this market, it can be postulated that people have an inherent curiosity about their ancestral roots.

While people may seek information about their genetic makeup for many reasons, discovering unexpected misattributed paternity is sometimes revealed with genetic test results. *Misattributed paternity* has been defined in the literature as a child's assumption their biological father (presumed or assumed father) is someone other than the actual biological father, often unbeknownst to the child and father(s) themselves (Lowe et al., 2017). Understanding the psychological effects of this event is the motivation for this research.

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## **Late Discovery Adoptees and Identity**

While the literature on the discovery of misattributed paternity based on commercial genetic testing is so far quite limited, adoption literature can serve as a starting point for conceptualizing how misattributed paternity may affect those who experience it. Although current adoption research encourages disclosure of adoption to the child as early as possible (Alexander et al., 2004), there are still many “late discovery adoptees” (LDA’s) who learn about their adoption in adulthood. LDAs who discover they are adopted in adulthood often perceive the discovery of their adoption as distressing due to the secrecy and stigmatization surrounding adoption (Baden et al., 2019). Literature indicates stigmatization can lead to internalized stress, relationship difficulties, depression, and other mental health difficulties (Bosmans et al., 2016). One study found those who received adoption disclosure after the age of five experienced distressing responses such as shock, feelings of being misled, and being temporarily disconnected or isolated from their families (Wydra et al., 2012). This study, in part, aimed to understand whether those who have experienced misattributed paternity experienced parallel emotional responses to LDAs.

## **Donor Conception**

Misattributed paternity can also arise with the use of assisted reproductive technologies (ART). Prior to the mid-1980s, it was standard practice for medical professionals to advise intended parents to withhold information regarding being donor conceived to their children, with the best interest of the child in mind (Readings et al., 2011). Efforts were often made to conceal the paternity of the child, including mixing donor and assumed (social or recipient) father sperm at the time of insemination (Friedman, 1980). In a qualitative study, donor-conceived offspring expressed a desire to have had open conversations about their donor conception with their parents throughout their upbringing, suggesting this subject is best discussed at various points across the child’s lifespan (Pennings, 2017). Attitudes toward openness in donor insemination have evolved over time, and research is growing to understand the implications of non-disclosure. Attitudes of anger, curiosity, confusion, and a sense of feeling different have been expressed by donor-conceived individuals in past research, thus prompting a shift toward early disclosure for those who were conceived through donor insemination (Beeson et al., 2011).

## **Right to Know Biological Parentage**

A commonality between children of misattributed paternity and donor-conceived children is the fundamental right to know one’s genetic origins. Legislation in the UK has shifted in the past few decades to allow children conceived through donor egg or donor sperm to be granted access to information about their donors, which previously was only accessible through the agency. Open-identity gamete donation is evolving as more research reveals how this fundamental right to know one’s genetic origins is becoming more prevalently expressed (Draper, 2007).

Understanding of biological inheritance begins at an early age in childhood development. Children before the age of four can describe whether they were adopted, but might not understand the full implications of what this means until about the age of 6-7 years old. In one study, 4-7-year-old children were told a story where a boy was born to one man, while also being adopted by another. The children were then asked whom the boy would resemble if he were raised by the adoptive father. Children before the age of seven were unable to grasp concepts related to biological inheritance, and from whom the boy would have gotten his physical characteristics. However, by the age of seven, children were able to acknowledge that the boy would inherit physical

characteristics from his biological father, while also inheriting beliefs from his adoptive father (Solomon et al., 1996). While it is important to consider a child's developmental capacity when discussing disclosure, it can be ascertained that children who are told about their origins at an earlier age have the opportunity to incorporate such complex knowledge into their self-concept, which can promote a positive perception of family and self.

One study examined 87 families created through reproductive donation, and 54 naturally conceived families, to understand if the quality of relationships between mothers and adolescents varied between the two groups using a standardized interview process, observational measures, and standardized questionnaires. Disclosing families reported more positive family relationships and higher levels of individual adolescent well-being when adolescents were told about their origins before the age of seven. This study suggests the earlier children are told about their, the better the outcome in regards to the quality of family relationships and psychological well-being (Ilioi et al., 2017).

Parents may choose to not disclose due to concerns about impairing the family bond between parent and child, while other parents may feel it's too late to disclose the details of their conception journey to the child (Jadva et al., 2009). In one study, findings suggest that non-disclosing families underestimate the medical risks involved for the offspring due to genetically inherited diseases, which could be an indication of parents disregarding the child's right to know their predisposition for medical or mental health issues (Tallandini et al., 2016).

The United Nations Convention on the Rights of the Child (1989) advocated for access to information through which a child can obtain information about their biological parents. Draper (2007) states when a child is not given information regarding their biological parents, the child is ultimately harmed in the process. Lack of knowledge can lead to *genealogical bewilderment* (Sants, 1964), in which a child's sense of self-identity and belonging is impacted by not knowing their genealogical origins. Psychological implications that could result from not knowing one's genetic origins include feelings of incompleteness, lack of genetic community, lack of understanding of one's place within the family, and a sense of grief and loss (Draper, 2007). These implications could also be applied to children of misattributed paternity, as the cultural narrative they constructed their entire life may have changed upon receiving the news of their biological father.

The "right to know" controversy is in part fueled by concerns about shortages in sperm due to men being unwilling to donate if anonymity is not promised. Utilizing a sample of current anonymous and open identity sperm donors from a large sperm bank in the U.S., Cohen et al. (2016) aimed to understand the implications if the USA adopted an anonymous donor system. The researchers reported that 29% of anonymous sperm donors in the sample would not donate if the law required donors to list their names in a registry accessible to donor-conceived children at the age of 18. One-quarter of participants would refuse to donate "at any price" if anonymity were not preserved. Additionally, donors who would not refuse reported they would require an additional \$60 per donation. Concerns exist in the field that reductions in willing donors would reduce the supply of donor sperm, thereby increasing the waitlist, making the procedure more expensive, and potentially risking reproductive tourism, in which people travel to other countries to receive insemination. Creating legislation around anonymity may force sperm banks to become less particular about whom they accept as donors, potentially creating less socially and medically desirable specimens (Cohen et al., 2016).

## **Identity Formation**

It is important to understand identity formation from a theoretical framework to understand how adoptees might be impacted at various stages of the life cycle. This framework can shed light on how identity, for those who have experienced misattributed paternity, might be impacted due to the correlation between adoptees and those who have experienced misattributed paternity by way of discovering one's biological parenthood. Erik Erikson's (1959) stages of psychosocial development provide such a framework in which psychologists can analyze how misattributed paternity impacts one's internal growth, development, psychological well-being, and identity formation. Erikson suggested that each stage builds upon the former stage. If one stage is completed successfully, the individual is able to transition into the next stage with more ease than someone who had a diminished ability to do so. The inability to complete the stages in an adaptable and healthy way can result in conflicts in future stages. It is hypothesized in the present study that discovering misattributed paternity in various ways could negatively impact one's psychological well-being, as well as shift one's already established sense of identity.

## **Psychological Well-Being**

While this proposed research aims to examine how identity might be impacted by the discovery of misattributed paternity, this research also aims to understand how one's psychological well-being might be affected. The field of psychology generally conceptualizes psychological well-being as being an indicator of optimal psychological functioning with hedonist and eudaemonist emphases of meaning (Ryan & Deci, 2001). Hedonist subjective well-being refers to an individual's affective and cognitive appraisal of life (Gao & McLellan, 2018). Seeking pleasure as a source of happiness is proposed to be universal, while satisfaction may look different across cultural lines. For example, seeking the sensation of pleasure is viewed as the ultimate goal in life from a hedonist perspective (Ryan & Deci, 2001). Eudaemonic theorists, in contrast, believe that finding meaning and fulfillment in life is important for psychological well-being (Deci & Ryan, 2006). Eudaemonic well-being exists when people are living in accordance with their values and potential (Waterman, 1993). Personal expressiveness is an important component in understanding eudaemonic well-being, as it calls for people to live authentically (Ryan & Deci, 2001). Living authentically will allow a person to realize their own purpose in life (Waterman, 1993). While it is still uncertain how specific life events impact the well-being, this study aims to examine how emotions and well-being might be related. Exploring how participants repressed or disclosed misattributed paternity to their family and community could reveal how their psychological well-being was impacted as a byproduct of living a eudaemonic life.

## **Purpose of Current Study**

This study sought to shed light on the personal and clinical implications for those who discover misattributed paternity. Existing data neglects to address how misattributed paternity affects individuals within a collective group. The primary research question explored in the present qualitative study is how one's psychological well-being and identity formation were impacted, challenged, or potentially disrupted upon discovering misattributed paternity through commercial DNA testing.

## Method

### Design and Participants

Phenomenological approaches in qualitative research aim to understand the nature of a particular phenomenon through qualitative inquiry (Creswell, 2013). Utilizing qualitative measures, the data was collected, transcribed, and analyzed to allow the researcher to construct a more profound understanding of the phenomenon. The researcher also allowed for an emergent design within the interview portion of the study, which allowed the principal investigator the opportunity to expand upon emergent themes being revealed throughout the interview process as they arose. Other design methods that do not allow for this flexibility may not incorporate emergent themes during the interview process, as the focus may be on the prewritten questions prepared for the study. Due to the scarcity of research on this subject, allowing for the freedom of exploration when new themes emerge encouraged deeper analysis of the phenomenon of misattributed paternity and its impact on psychological well-being and identity formation.

Approval from the Institutional Review Board (IRB) at Alliant International University was obtained prior to the commencement of the study. Participants were recruited from two specific groups: misattributed and donor-conceived. Those in the misattributed group were misattributed for reasons such as the mother did not know the paternity, or the mother knew the paternity but chose not to tell the child for reasons such as an affair, divorce, or social stigma. Those in the donor-conceived group were conceived from sperm donation. The parents knew of this choice; however, the child was not informed of their conception story until the results of the DNA test were revealed. The rationale for this construct was due to the large number of interested participants, many of whom did not know they were donor-conceived. Therefore, this research included 33 participants; 18 participants were placed in the misattributed group and 15 were placed in the donor-conceived group.

The age range of all participants was 23-74 years old (misattributed group mean age = 52.7; donor conceived group mean age = 37.5). Majority of the sample identified as female ( $n = 22$ ; 66%) while the remaining participants identified as male ( $n = 11$ ; 33%). Participants resided in 19 US states, the United Kingdom, and Australia. Majority of participants identified as White or European prior to receiving their DNA results ( $n = 32$ ; 96%). However, upon completion of their DNA results, a few participants revealed their racial identity had changed to include other racial or ethnic groups ( $n = 7$ ; 21%).

### Procedure

Recruitment occurred through a flyer posted on social media platforms such as Facebook and Reddit. Interested participants contacted the principal investigator by email and received a consent form describing the purpose of the study, procedures, voluntary participation, withdrawing from the research, compensation, and confidentiality. When completed, individuals received a demographic form as an initial screener tool to complete and return to the researcher by email. Individuals perceived to be eligible participated in a phone screen to ensure eligibility. Finally, the participant and researcher arranged a time to have a recorded Zoom interview. Once participants completed the interview, they were thanked for their participation and given resources for mental health services. Participants were not compensated for their participation in the study.

**Table 1**  
*Participant Demographic Characteristics*

Demographic Characteristic		n	%
Age	23-33	5	15
	34-44	13	39
	45-55	6	18
	56-66	5	15
	67-71	4	12
Gender	Female	22	66
	Male	11	33
Highest Education	High School	1	3
	Some College	10	30
	Associates	6	18
	Bachelors	6	18
	Masters	6	18
	Doctorate	4	12
Annual Income	< 40,000	5	15
	40,000 - 60,000	4	12
	60,000 – 80,000	10	30
	80,000 – 100,000	5	15
	>100,000	9	27
Age when Results were Received	20 - 30	5	15
	31 – 40	13	39
	41 – 50	4	12
	51 – 60	4	12
	61 – 70	4	12
	71	2	6
	Unknown	1	3
Racial Identity Prior to Receiving Results	Caucasian/European	32	96
	Native American	1	3
Racial Identity Differed Post Results		7	21

***Semi-Structured Interview***

Semi-structured interview questions were formulated by the principal investigator specifically for this research, with input and feedback from the researcher’s colleagues. Interview questions were originally written to address seven *categories of inquiry*: motivation for testing, race/ethnicity, discovery, secrecy, post results, identity, and psychological well-being. These

categories of inquiry were used during the data analysis phase of research as well. Interviews lasted about 60-120 minutes per participant.

Interview questions were largely open-ended and followed a theme based on each category of inquiry. For example, in the Secrecy category, a question asked was, "How has secrecy impacted your life?" This question aimed to understand whether there was an aspect of secrecy prior to, or after the discovery of misattributed paternity. In the Identity category, a question that was asked to all participants was, "Do you feel the results of your DNA test have impacted your sense of self? How so?" This question allowed participants to verbalize their prior understanding of self, and how this understanding has, or has not, shifted since their discovery. Further, in the Psychological Well-Being category, participants were asked, "How did you cope with the discovery of misattributed paternity?" Participants were able to express what types of coping tools they had at the time of their discovery, while also identifying coping techniques that were implemented following their discovery.

### **Data Analysis**

Upon the conclusion of the interviews, the researcher and four research assistants transcribed the content. Once all interviews had been transcribed, the participants' transcripts were divided into groups based on donor conception or misattributed conception. Two research assistants were then assigned to each group. The principal investigator oversaw the research assistants and also coded a portion of the protocols from each group. Next, six to seven transcripts were assigned to each researcher to begin the first pass coding process. After the first pass of coding, the research dyads traded their transcripts with their research partner in the same group, who then completed the second pass of coding. This allowed the research assistants to become experts in their assigned group, having coded nearly everyone in their group.

*Within-case analysis* of the first pass coding was utilized to determine codes for each individual participant. *Across-case analysis* occurred in the second pass of coding, which allowed the researchers to extract themes related to the collective experience within the two groups. This method is often used with larger qualitative samples, or when the researcher is aiming to understand the collective experience, rather than the individual experience (Ayres et al., 2003). In this case, the collective groups being analyzed were the misattributed group and the donor-conceived group.

During the coding process, the categories of inquiry that yielded the most responses in the interview portion of the study were used to evaluate participants' lived experiences, psychological well-being, and identity formation. These categories are as follows: discovery, secrecy, post results, identity, and psychological well-being. These five categories were used to organize how frequently a participant disclosed a code that corresponded with a theme. Codes were established verbatim or were implied by each individual participant, which ultimately were categorized into themes. Themes were determined based on how often a code was expressed throughout the course of the interview. Examining a code based on the frequency of expression among the five categories of inquiry allowed the researcher to rank the most frequently endorsed themes overall to establish which themes were most prominent in this study. While there may be themes that were expressed by many individual participants in both groups, the unit of analysis in this study were the collective groups. Themes expressed in fewer than two categories of inquiry were not considered a major finding. For example, sentiments of sadness, grief, and loss were expressed in both the misattributed and donor-conceived groups in all five categories of inquiry; meaning, most participants in both groups expressed sadness, grief, or loss. This delineation is how *sadness, grief, and loss* became a core theme and is how other themes were considered. Researchers were in

constant communication with each other throughout the process and would discuss discrepancies in codes to arrive at a consensus for the final themes.

## Results

A vast majority of people would have liked to have known their results sooner to be able to develop a relationship with their biological family and be able to integrate this information into their identity earlier ( $n = 25$ ; 75%). Fewer reported not wanting to know sooner, as they felt it was “perfect timing” due to uncertainty as to how this information would have been received in adolescence ( $n = 3$ ; 9%). Some were conflicted about whether they would have liked to have known sooner, expressing concern about how this news would have been dealt with in their family ( $n = 3$ ; 9%).

It is of note that the themes revealed for the misattributed group and the donor-conceived group had some overlap; however, they were not entirely the same. There was a total of nine themes for the misattributed group including sadness, grief, and loss, seeking connection and belonging, betrayal and anger, otherness, curiosity, relief and comfort, surprise, acceptance, empathy and rationalization. The donor-conceived group had an additional three themes, in addition to the 9 themes seen in the misattributed group, including existential concerns, self-assuredness, and right to know and advocacy. Themes were hierarchically organized based on the frequency of endorsement across all participants (Figure 1), with the most frequently endorsed themes among both groups being sadness, grief, and loss, seeking connection and belonging, and betrayal and anger (Figure 2). These can be considered the core themes most frequently expressed in both groups.

## Major Themes

### *Sadness, Grief and Loss*

Participants in both the misattributed group and the donor-conceived group expressed feelings of grief, loss, and isolation in response to discovering misattributed paternity in each of the five categories of inquiry. Grief and loss were often associated with the loss of biological connection to one’s assumed biological father. Additionally, participants expressed having missed spending time with their newly discovered biological father, half-siblings, or other family members. Participants shared how they felt “sad and emotional,” describing the grief as “painful.” On the same day one participant discovered misattributed paternity, she learned her biological father was deceased:

*The same day that I found out all of this, we were able to find my real dad's obituary...I found out that he was no longer with us. It was a mix of emotions. So, at first, I was really shocked. And then I was kind of upset...And then I was sad, because I was like, 'I'm not even gonna get a chance to have an experience with this guy'. And so, it was... it was a lot of emotions, I guess. It was weird because I never met this person. But it almost felt like grief, a little bit, when I found out that he was gone... and I feel silly for being sad and upset about it, when I didn't even know this person.*



Isolation was expressed in relation to a fractured sense of self, feeling as though they needed to perpetuate the secret, and feeling as though no one understands their situation:

*At the moment I was kind of just dumbfounded, just numb. I remember feeling really numb at that point and thinking, 'This can't be true. But it is true. What happened?' I had no one to really ask because my mom had passed away. 'How am I going to fix this? Who can I ask questions to? What's going on?'*

### ***Seeking Connection and Belonging***

Participants in both the misattributed and donor-conceived groups expressed a desire for connection and belonging in multiple ways, with both groups having expressed this in all five categories of inquiry. Being seen, heard, and acknowledged by both the family they were raised with and their newly discovered biological family was an important value verbalized throughout the interviews. One participant described her experience in discovering her donor-conceived half-siblings:

*...but suddenly the thought that I have other people who are genetically part of me and have definitely lived similar experiences to me was just so euphoric. I don't think I could put that into words. And the thought of them [newly discovered donor-conceived half-siblings] was euphoric...it felt really, really good and I just felt listened to, and heard... Knowing that I have these siblings is so awesome.*

Fear of rejection from the newly discovered biological father and family members was commonly expressed, as well as fear of being rejected by their family of origin. One participant described the relationship she formed with her donor father after initiating contact with him:

*He can block me and pretend that none of this existed, but for me, my entire world got disrupted and erupted. So, everyone on that side of that line [biological/donor father] is operating from a place of privilege where their identity did not get extinguished. Their existence is not connected to someone's choices to make some extra money during college.*

Noticing and sharing similarities with newly discovered biological family members, especially physical attributes, was a unique experience expressed by participants in both groups. The experience of meeting new biological half-siblings was described by one participant:

*You keep looking for those commonalities, like 'Oh, do I look like them? Are there things that we do similar?' Even if it's a very physical body manifestation of who someone is, or habits or traits. So, it was almost like a curious experience of seeing this person who you share DNA with, to see how similar you are, different you are... Yeah, I think there's a way in which you're still looking to confirm family...*

### ***Betrayal and Anger***

Expressions of betrayal and anger were revealed as a highly endorsed theme with both groups expressing betrayal and anger in all five categories of inquiry. Feelings associated with this theme include feelings of betrayal, mistrust in others or self, resentment, anger, and fury. After confronting her mother about her results, one participant's mother continued to deny having used a sperm donor to conceive her: "I was so angry. It was just a consuming, uncomfortable anger for the year following. I'd never been so angry."

Furthermore, participants described being burdened by a pervasive pattern of family secrets. One participant was raised by her biological father; however, she was always told that he was her stepfather. When her results revealed the truth in her paternity, she was able to conceptualize how her parents kept her paternity a secret to preserve their place in their community:

*He knew I was his child, but he could not act like I was because my mother didn't want anybody to know, so they had to play this charade... That to me would be really hard to pull off. You almost have to remove yourself. And that's what he did. He basically was not emotionally available to any of us. He was an excellent provider, he was a good man, he was never, ever mean to us. But it was obvious that he was a provider, and he wasn't emotionally attached or anything like that. He just kept himself at an arm's distance.*

### ***Curiosity***

Curiosity was expressed more frequently in the misattributed group compared to the donor-conceived group. Curiosity in both groups was associated with a desire to know more about one's biological family's ancestral lineage. The misattributed group expressed curiosity in all five categories of inquiry while the donor-conceived group expressed this sentiment in two categories of inquiry.

A desire to know more about the biological father was largely expressed in both groups, as participants explained they would like to know where they got their personality traits from and would like to know more about their biological father as a person. One participant explained how she discovered her assumed father was not her biological father when she was 67 years old; however, her results did not reveal *who* her biological father was:

*I would go down the road and cry, just to get out of the house. It's been hard (crying)... I don't think I can rest until it is done. I do this [search for biological father] every day. Like four to five to six hours a day sometimes. I want to know a name... If I can find that name, I'll be so happy... I think I'll be more at rest. I think I need the validation.*

Furthermore, participants expressed a desire to know their medical history. Many participants viewed having a familial medical history as a human rights issue, as several participants were treated for medical conditions throughout their lives based on the family medical history of their assumed/social father when these procedures were not necessarily pertinent. Additionally, some participants expressed they would have pursued screening for certain medical conditions had they known their family medical history sooner:

*I just find it highly irresponsible and that's where a lot of my anger comes from, because if nothing else, if nothing else, I think most people can agree that your family medical history is pretty vital, or you wouldn't have to answer that question every time you go to the doctor.*

### ***Otherness***

Feeling like an “other,” or as though they did not belong, was a prominent theme expressed by both groups, with the misattributed group expressing it in all five categories of inquiry and the donor-conceived group expressing it in four categories. Feeling like the “other” was often described as a sense of not belonging for the duration of one’s life, with this sense being heightened after discovering the results. Additionally, the loss of genetic kinship with one’s nuclear family also contributed to a sense of otherness.

One participant described having always felt different compared to his brothers and assumed father. Upon receiving his DNA results, he learned he and his brothers each had different sperm donors and were not biologically related to their social father:

*Always growing up, I didn't quite feel like I fit in. Like I said, we were just all different from each other. My brothers... I could never find the connection between me and my dad...And so, it just never felt... the connections just didn't feel as strong as they should have been. And so, finding out the identity of the donor and more about him... the biggest challenge for me, I think, has been this feeling of 'Where would I be had I known this information, five years earlier, 10 years earlier, 20 years earlier?' ...Where would I be if I had actually been one of his biological children in his family? What different opportunities would I have had?*

Additionally, feeling a sense of belonging through physical or personality likeness to newly discovered biological family members alleviates a prior sense of feeling out of place. One participant described having not seen anyone in her family look like her until she received her results:

*And there are similarities now. I have green eyes, like my [paternal] cousin, or I look like my [paternal] aunt. I've seen pictures of her when she was young and I was like, 'Oh my god, I finally do look like somebody in my family,' which is kind of cool. I have the same nose as their side of the family.*

### ***Surprise***

Surprise was equally expressed by both groups in three categories of inquiry. When describing surprise, participants revealed feelings such as shock, confusion, disorientation, disbelief, overwhelm, and excitement. These feelings could be viewed on a spectrum with excitement on one end and disorientation and disbelief on the other.

*Sad, jubilant, I mean every, every emotion you could find. I probably felt it over the period of time. Some [emotions] at the same time that we're diametrically opposed to one another. Angry and joyous at the same time. I was sad and joyous at the same time...*

### **Relief and Comfort**

Relief and comfort were expressed in four categories of inquiry for the donor-conceived group compared to three categories in the misattributed group. Both groups expressed relief in not being related to toxic family members, often including the assumed/social father. Furthermore, participants expressed a greater sense of personal agency and a sense of completeness upon discovering their results.

Concerns about physical or mental health difficulties were prominent in participants and for one participant, discovering that her social father was not biologically related to her provided a sense of relief that she may not inherit some of his problematic mental health struggles due to them not being biologically related:

*So, I would say that it's only negatively affected experiences with my parents because sometimes I look at things that the dad that raised me does. And I used to be like, 'Oh, how could I even have that in my body?' But now I look, and I'm like, 'Thank God that's not part of me.'*

When discussing the relationship with her mother, another participant explained that she felt a sense of completeness upon her discovery:

*She [mother] would see me as an extension of herself, so much so that I was initially pushed into the same career as her and, 'Oh, you're going to look just like me,' ...I didn't feel like my own person for much of my adult life. So maybe that's why having this whole other half of me that I don't have to tell her about or don't have to share with her... it means I get to find myself and be myself and not be, you know, while I'm still half of her, I get to be the whole me.*

### **Acceptance**

Acceptance was described in both groups equally, expressing acceptance in three categories of inquiry. Both groups predominantly explained that while they might have liked to have discovered the news in a different manner, they were happy to know now. Additionally, participants expressed a desire to cultivate new relationships with newly discovered biological family members. One participant, when asked what this news meant to her stated:

*It's really changed everything about my life. It's been crazy. It's been a roller coaster, but it's a really big part of my identity now and I wouldn't want to go back to not knowing. I'm really glad that I know this now. And the connections that I've formed are really, really valuable. And I would never want to lose those. So, I think it's a really integral part of my life at this point.*

### ***Empathy and Rationalization***

The donor-conceived group revealed empathy and rationalization in three categories of inquiry while the misattributed group expressed it in two categories. Understanding parent's circumstances as to how misattributed paternity occurred was a theme in both groups. Participants thought about what might have been going on for their parents at the time of their conception and throughout their life. Attempts to understand how this might have happened was a common component expressed in this theme. One participant was able to empathize with her deceased parents after discovering this news at 71 years old:

*If you've had an idyllic childhood, you've had a wonderful time with your parents, and you idolize the situation... to then find out that you don't belong to that person, must be quite upsetting. But to be honest, I didn't mind not belonging to him [assumed father]. To me... it explains a lot of things. It explained his frustration with life, his anger, his annoyance, and his attitude towards me. I feel sorry for him. I feel sorry for the fact that he was a young man, probably very naïve, and got himself into a situation with a person, and then found out they're incompatible. And not only that, but he was also raising somebody else's child and having very little money to do it.*

### ***Existential Concerns***

The existential concerns theme was only revealed in the donor-conceived group and was endorsed in four of the five categories of inquiry. Participants in the donor-conceived group expressed a sense of being commoditized or trafficked due to their donor conception. For many, the exchange of money and the clinical nature of conception led to an unsettling feeling that life was precarious, which made their experience of their human existence complicated. One participant discussed how discovering she was donor-conceived impacted her feeling like a commodity:

*It's quite dehumanizing in a way to be just seen as a deposit, ages ago, for a bit of cash. ...It's a lot of conditionality, and I felt like a lot of the stuff around him was more for his benefit and I'm just kind of this bypass product...If someone hadn't picked my sperm sample out of the freezer or whatever it was or chose that one that day, I would be destroyed...I'm not just like the \$20 cash that you got back in the late 80s, 90s. It just feels like I've kind of been slightly commoditized. Not getting into like human trafficking but, it's kind of a bit of a trading in lives in a way, slightly, because this fertility clinic was there to make a profit.*

Another participant shared sentiments related to feeling as though his mere existence was being contested because of discovering misattributed paternity through donor conception:

*I guess it'll sound overly dramatic, but it makes me feel kind of like I'm not like a real person. ...I'm just some sort of like lab experiment... Like I'm disconnected from kind of the natural progression of humanity. I guess sometimes I feel like I shouldn't exist. Like it seems weird, like I'm some kind of anomaly. It feels like I shouldn't be here. It feels like I don't fit in*

*anywhere. I feel like my origins were so clinical. Like I was a procedure. So, was I in a freezer? It's also kind of gross. ...Was I in a cup or something? It's bizarre and weird. And gross and horrifying. It feels more precarious. How did I actually come to be?*

### ***Self-Assuredness***

Sentiments of self-assuredness were expressed in three of five areas of inquiry. A recurrent attitude expressed in this theme revolved around trusting one's own sense of intuition and gaining confidence in the pursuit of their own goals separate from familial pressures. Many participants felt they had permission to live more authentically and could follow their intuition in a way they hadn't before the discovery. One participant explained how her trust in herself has increased since her results:

*I feel more sure of myself because I've had quite a few of my gut instincts be ratified, and I've known that I was right about something. I've learned to trust myself more. I used to carry a lot of guilt, but now I'm like, 'I'm my own person. They chose to bring me here. And they chose to bring an autonomous person into this world and now I can do what I want.' It's been freeing to look at the universe in that kind of way.*

### ***Right to Know and Advocacy***

Both groups reported urgency in the right to know efforts and social advocacy as being an important aspect of their discovery. These themes were revealed in three of five categories of inquiry for the donor-conceived group, thus rising to the level of a theme. Knowing one's biological origins was an important factor in moving forward after discovering misattributed paternity and being donor conceived. Additionally, spreading awareness about issues associated with misattributed paternity was an important aspect of this theme. One participant explained how a right to know one's genetic origins is an essential issue that needs to be addressed:

*The only responsibility I feel as far as being donor conceived is spreading awareness on it. Especially in my membership in the infertility community, I think too often infertile people focus more on getting to the end product, rather than how the end product is going to feel one day when they grow up. So, I do try to gently assert that I think it's a human right that if information about your genetic origins can be shared, I think it's a human right that it should be in all cases.*

Another participant described how her involvement in the donor-conceived community has given her a new sense of purpose in life:

*I basically have a new career at this point. I really have made it a mission to try to change things for the donor-conceived population, for all NPEs [not parent expected]. I talk with parents every single day about how to raise their donor-conceived kids in a way that doesn't cause this craziness. And so that's been a huge source of, as frustrating as it can be sometimes,*

*it's been a huge source of meaning. Supporting other people who are going through this, speaking about it...*

### **Other Findings**

While the aforementioned major themes were most salient, two other findings were also revealed and are valuable in explaining the lived experience of participants in this study. These findings could give rise to future areas of research, as they were relevant to our study and warrant attention in future literature.

### ***Genetic Mirroring***

Genetic mirroring was a phenomenon in which a person, upon discovering misattributed paternity, struggles to recognize oneself either by looking in the mirror or looking at other family members. This term is primarily used within the adoption community and is not widely known or used in scholarly literature. For example, some participants struggled to grapple with their reflection upon discovering misattributed paternity:

*So, it was like looking in the mirror and all of a sudden, 'Okay, that's not a Scottish face. That's someone else...that's someone else's face.' That was really weird and really weird to sit with...there is a little sense of 'I've been robbed.' This other guy was my father that I didn't know, and he is now taking my physical identity somewhat because now, when I look at my face, I now see him instead of my dad or instead of the people that I love. So, for a while, it was like, 'You stole my face!' I was kind of mad at him [biological father] but that kind of subsided. ...So, I felt a little robbed at first. I thought I had this shared identity with physical identity with them [family of origin] and then it turned out I didn't. So that was kind of like... it was stolen from me.*

Genetic mirroring could also be experienced as seeing themselves in a newly discovered family member, which provides an individual with a new perspective:

*Now that I look in the mirror... I can't see unsee my face shape now. Even looking on Zoom and stuff, and I see my face shape... I mean, it's always been this shape, but I've never seen it like this before. I just remember looking at [biological father's] eyes and thinking, 'Those are my eyes. And I've never seen my eyes before...' I never saw that reflection before and I couldn't stop staring at him, and he has the same... our same cheeks and same eyes... and I didn't even know that I was missing that until I had it.*

### ***Changed Nothing and Everything***

Lastly, another important finding was the sensation of everything in one's life has changed, yet practically nothing changed. This experience could be described as having a dichotomous emotional response to something that happened internally, yet in one's day-to-day life, nothing had shifted. One participant described how her perceptions have changed:

*It's basically changed everything, but it's also changed nothing. It's changed everything in a way that I'm-- I now know myself. Yes, I'm donor-conceived and that's really a bit weird. It's changed nothing within my family, where I sit with them, and the way my parents feel towards me.*

## Discussion

This study aimed to identify how one's psychological well-being and identity formation were affected upon the discovery of misattributed paternity after taking a commercial DNA test. This study is unique in that it compares two groups who have experienced misattributed paternity. This comparison has not been made in prior literature and is valuable in examining the experience of the same phenomena among two groups. As previously mentioned, nine themes were shared among both groups, despite a variation in frequency. Participants from both groups most frequently expressed the experience of sadness, grief, and loss, seeking connection and belonging with others, and betrayal and anger. These three themes are considered to be the core themes shared equally by both groups. This study supports prior literature revealing that late-discovery adoptees experienced increased psychological distress when discovering their adoption status later in life (Bosmans et al., 2016; Wydra et al., 2012). Grief and loss reactions have been observed since Kirk's early work in this field in the 1960's and was observed in this study as well. Additionally, contacting donor siblings and connecting with others who have shared a similar experience has been seen as a positive both in terms of psychological well-being and in understanding identity, which is another similarity observed in this study (Readings et al., 2011).

Considering family systems dynamics is essential when conceptualizing the impact of late-discovery misattributed paternity. This discovery not only impacts the individual who discovered this news, but it also impacts parents and extended family members. Interactional patterns, communication norms, and boundaries are likely going to be challenged with the discovery of such news. Examining changes within a family system would be an important focus to assess upon the discovery of misattributed paternity.

When understanding the findings in relation to identity formation, Erik Erikson's (1959) stages of psychosocial development provide a framework in which mental health providers can analyze how misattributed paternity impacts one's internal growth, development, psychological well-being, and identity formation. Erikson suggested each stage builds upon the former stage. If one stage is completed successfully, the individual is able to transition into the next stage with more ease than someone who had a diminished ability to do so. The inability to complete the stages in an adaptable and healthy way can result in conflicts in future stages. In the case of the current study, the discovery of misattributed paternity was observed to complicate one's ability to attach and connect to others in a meaningful way. Some individuals struggled to contribute to the "bigger picture," as identifying with particular groups in the community was jeopardized upon receipt of the discovery. Unanswered questions were described by some participants as leaving a feeling of unfinished business in the world.

While existential concerns were only expressed by the donor-conceived group, this theme warrants further exploration, as prior literature has not focused on this experience. Participants shared how discovering their donor conception origins later in life left them pondering their meaning and purpose, the idea that they were a mere commodity and therefore replicable, and questioning their existence and what it means to be human. Existential concerns have not been explicitly documented in adoption or ART research, making this topic one that could be expanded upon.



## Secrecy vs. Privacy

There is a difference between secrecy and privacy within the adoption and ART communities, with the distinguishing factor being withholding information from *select people* rather than *everyone*. Privacy enables individuals or families to be selective with those with whom they share the story of their conception. For example, a family may decide to not share ART information with casual acquaintances or work colleagues, as they do not *need* to be privy to the information (Allan, 2012). However, secrecy implies that people who need to know the conception story, do not. For example, a treating physician might not order the correct tests with an individual who was donor conceived if the physician was unaware of the person's origins. This might result in unnecessary medical treatment and delayed diagnosis of a medical condition due to the doctor not having an accurate medical history. This situation was expressed more than once in the present study. In one instance, a participant expressed having started prophylactic colonoscopies in her 30s due to her assumed father's medical history of cancer. This was an unnecessary procedure, as she would not have gotten these treatments had her paternity been known. Furthermore, another participant described being depressed and suicidal as a teen and was prescribed the same depression medication as her social father at her mother's suggestion. Historically, not disclosing to a child that ART was used in conception was commonplace and recommended in the medical community. However, research has revealed that nondisclosure could actually be detrimental to the psychological well-being of the individual, as well as the parents (Golombok, 2013). Balancing secrecy and privacy in various settings is an important conversation in legal, medical, and clinical settings to support those who have experienced misattributed paternity.

## Clinical Application

When treating someone who has experienced misattributed paternity, clinicians should seek additional training and consult with local agencies to better equip themselves with interventions to address disenfranchised grief in a clinical setting. Disenfranchised grief is grief that cannot be, or is not, openly acknowledged in societal, social, or public lack of validation (Doka, 1989). Creating an environment in which the client can feel seen and heard is important in promoting a positive therapeutic environment. Additionally, continuously addressing various grief responses would allow the clinician to be considerate of the enduring grief reaction a client may be experiencing, therefore enabling the client to view their response as normal and possibly chronic. Clinicians can play a role in normalizing a client's grief reaction in a therapeutic setting.

*Nonfinite grief* (Bruce & Schultz, 2002) is another form of grief that is often left unidentified in the mainstream media and in clinical settings. Nonfinite grief is a loss experience that endures time, is typically precipitated by a negative situation or event, and retains a sense of physical or psychological existence in one's life (Bruce & Schultz, 2002). Powerlessness, uncertainty, disconnection from the mainstream, and social alienation all contribute to a nonfinite grief and loss experience (Harris & Winokuer, 2021). Those who experience misattributed paternity can experience loss throughout their lifetime in the form of continuously being reminded they are not biologically related to their family members through genetic mirroring, for example. Additionally, learning one's new medical family history is another way in which reminders of the discovery can occur unexpectedly and can be a reminder of the discovery years after the news was learned. Being reminded of the discovery throughout one's lifetime can contribute to chronic sorrow, which is a term that was originally coined by between (1962) when studying parents of children who had a disability. In those who experience chronic sorrow, there is an incongruence in what one dreams or hopes for and reality (Harris & Winokuer, 2021). With this discovery altering

one's prior sense of reality, chronic sorrow could be a concern for some who discover misattributed paternity.

Clinicians and healthcare providers would also benefit from additional training specific to donor-conceived individuals, as these training will provide a foundation for having delicate conversations around the family formation, family secrecy, and communication. Additionally, adjusting intake forms and biopsychosocial assessments are important steps in inclusivity, as there are various ways families are created. Asking how one's family was formed and exploring whether a conception was difficult for families can shed light on issues related to disclosure, conception, secrecy, and privacy. Understanding how the late-discovery of parentage impacts the individual is an important component of treatment. Providing referrals to appropriate providers, support groups, and literature are ways in which clinicians can also support their clients whom discovery of misattributed paternity.

### **Limitations and Suggestions for Future Research**

There are a few limitations in the present study. Firstly, the sample primarily identified as Caucasian or White, leaving the racial and ethnic composition of the study homogenous and primarily of European ancestral descent. Further research could aim to explore a more diverse population to better understand how cultural components impact those who discovered misattributed paternity. While the present study has a larger sample size than many other qualitative studies, it is not generalizable to the public at large. Future studies could implement mixed methods, incorporating assessments that measure self-esteem, psychological well-being, or identity to glean a deeper statistical analysis of the subjects while also highlighting their lived experience with a qualitative interview in an attempt to create a more generalizable study. Lastly, exploring existential factors such as meaning, purpose, and existence among those who discovered their donor conception origins would be a valuable endeavor in future research. This could be an important contribution to literature to assist in changes in legislation and to inform clinical practice for this group.

### **Summary**

The discovery of misattributed paternity in adulthood is a complex and often convoluted situation that can cause psychological distress and disjunction to one's well-being and identity formation, regardless of misattributed or donor status. Examining one's experience from a systemic lens to understand how this situation impacts an entire family system will shed light on adjustment overall. Addressing sadness, anger, betrayal, grief, and the desire to connect to biological family members and others in the misattributed community are important priorities for those who experience this phenomenon.

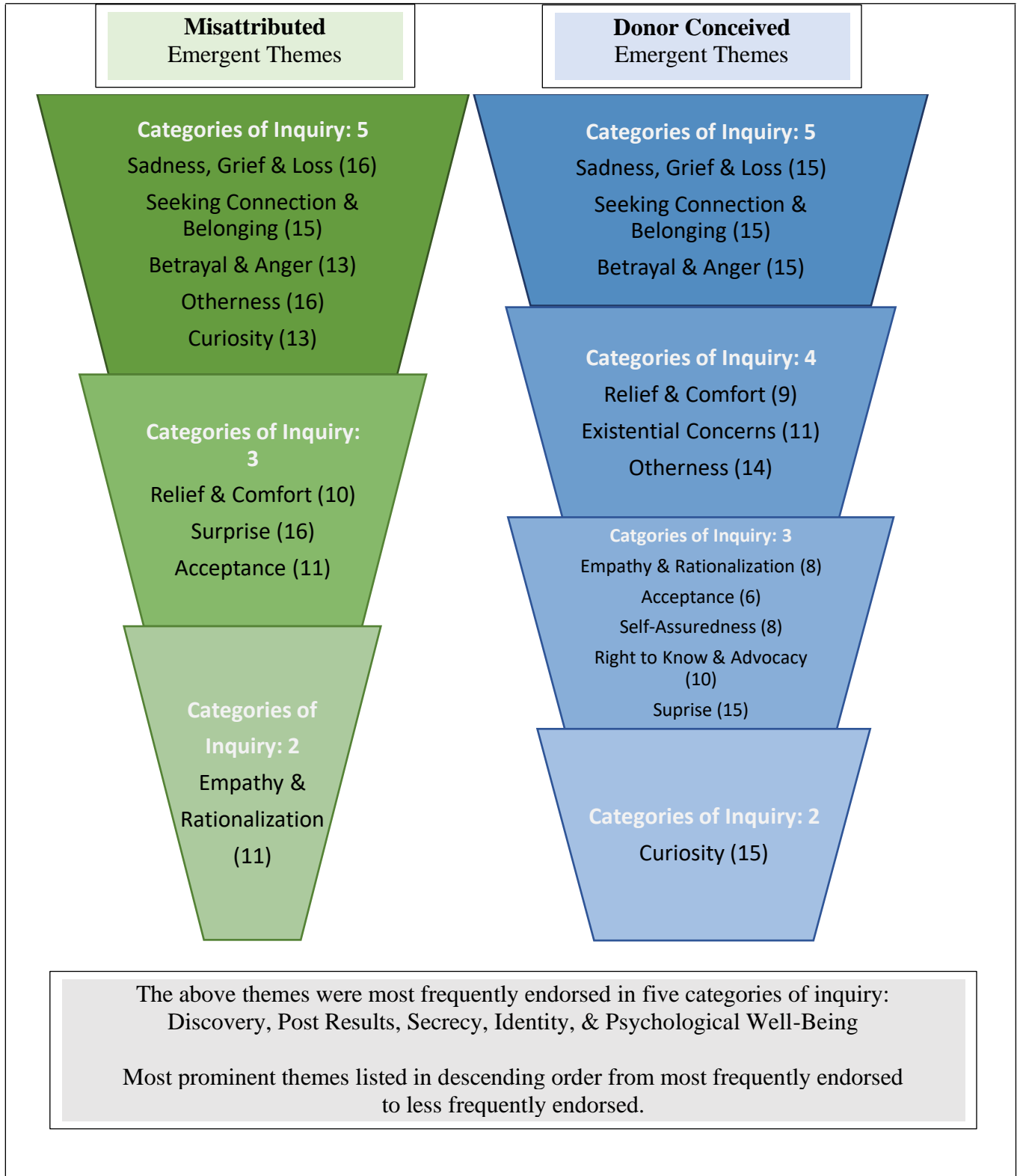
### **References**

- Alexander, L. B., Hollingsworth, L. D., Dore, M. M., & Hoopes, J. W. (2004). A family of trust: African American parents' stories of adoption disclosure. *American Journal of Orthopsychiatry*, 74(4), 448-455. <https://doi.org/10.1037/0002-9432.74.4.448>
- Allan, S. (2012). Donor conception, secrecy and the search for information. *Journal of Law and Medicine*, 19(4), 631-650. <https://doi.org/10.2139/ssrn.2102423>

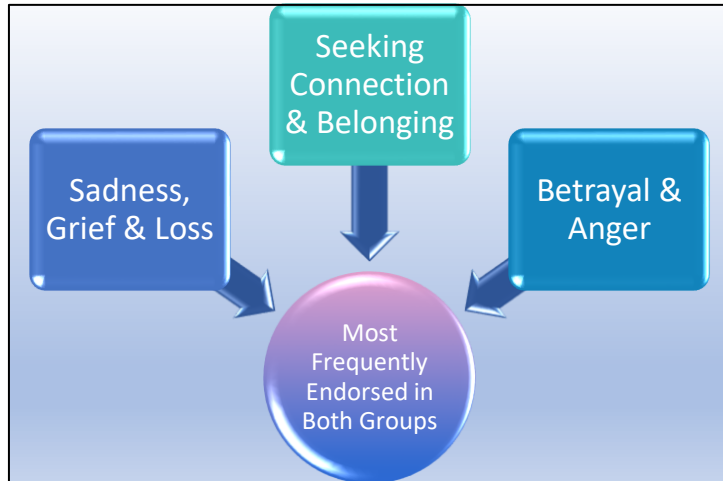
- Ayres, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research, 13*(6), 871–883. <https://doi.org/10.1177/1049732303013006008>
- Baden, A. L., Shadel, D., Morgan, R., White, E. E., Harrington, E. S., Christian, N., & Bates, T. A. (2019). Delaying adoption disclosure: A survey of late discovery adoptees. *Journal of Family Issues, 40*(9), 1154-1180. <https://doi.org/10.1177/0192513x19829503>
- Beeson, D. R., Jennings, P. K., & Kramer, W. (2011). Offspring searching for their sperm donors: How family type shapes the process. *Human Reproduction, 26*(9), 2415-2424. <https://doi.org/10.1093/humrep/der202>
- Bosmans, K., Mousaid, S., Cuyper, N. D., Hardonk, S., Louckx, F., & Vanroelen, C. (2016). Dirty work, dirty worker? Stigmatisation and coping strategies among domestic workers. *Journal of Vocational Behavior, 92*, 54-67. <https://doi.org/10.1016/j.jvb.2015.11.008>
- Bruce, E., & Schultz, C. (2002). Non-finite loss and challenges to communication between parents and professionals. *British Journal of Special Education, 29*(1), 9-13. <https://doi.org/10.1111/1467-8527.00231>
- Cohen, G., Coan, T., Ottey, M., & Boyd, C. (2016). Sperm donor anonymity and compensation: An experiment with American sperm donors. *Journal of Law and the Biosciences, 3*(3), 468-488. <https://doi.org/10.1093/jlb/lsw052>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among the five approaches*. SAGE Publications.
- Deci, E. L., & Ryan, R. M. (2006). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies, 9*(1), 1-11. <https://doi.org/10.1007/s10902-006-9018-1>
- Doka, K. J. (1989). *Disenfranchised grief: Recognizing hidden sorrow*. Lexington Books/D.C. Heath.
- Draper, H. (2007). Paternity fraud and compensation for misattributed paternity. *Journal of Medical Ethics, 33*(8), 475–480. <https://doi.org/10.1136/jme.2005.013268>
- Erikson, E. H. (1959). *Identity and the life cycle*. Norton.
- Friedman, S. (1980). Artificial insemination with donor semen mixed with semen of the infertile husband. *Fertility and Sterility, 33*(2), 125-128. [https://doi.org/10.1016/s0015-0282\(16\)44531-0](https://doi.org/10.1016/s0015-0282(16)44531-0)
- Gao, J., & Mclellan, R. (2018). Using Ryff's scales of psychological well-being in adolescents in mainland China. *BMC Psychology, 6*(1), 17-29. <https://doi.org/10.1186/s40359-018-0231-6>
- Golombok, S., Blake, L., Casey, P., Roman, G., & Jadvá, V. (2013). Children born through reproductive donation: A longitudinal study of psychological adjustment. *Journal of Child Psychology and Psychiatry, 54*(6), 653-660. <https://doi.org/10.1111/jcpp.12015>
- Harris, D., & Winokuer, H. R. (2021). *Principles and practice of grief counseling*. Springer.
- Ilioi, E., Blake, L., Jadvá, V., Roman, G., & Golombok, S. (2016). The role of age of disclosure of biological origins in the psychological wellbeing of adolescents conceived by reproductive donation: A longitudinal study from age 1 to age 14. *Journal of Child Psychology and Psychiatry, 58*(3), 315–324. <https://doi.org/10.1111/jcpp.12667>
- Jadvá, V., Freeman, T., Kramer, W., & Golombok, S. (2009). The experiences of adolescents and adults conceived by sperm donation: comparisons by age of disclosure and family type. *Human Reproduction, 24*(8), 1909–1919. doi: 10.1093/humrep/dep110
- Kirk, H. D. (1967). *Shared fate: a theory of adoption and mental health*. Free Press of Glencoe.
- Lowe, G., Pugh, J., Kahane, G., Corben, L., Lewis, S., Delatycki, M., & Savulescu, J. (2017). How should we deal with misattributed paternity? A survey of lay public attitudes. *AJOB Empirical Bioethics, 8*(4), 234-242. <https://doi.org/10.1080/23294515.2017.1378751>

- Olshansky, S. (1962). Chronic sorrow: A response to having a mentally defective child. *Social Casework*, 43(4), 190–193. <https://doi.org/10.1177/104438946204300404>
- Pennings, G. (2017). Disclosure of donor conception, age of disclosure and the well-being of donor offspring. *Human Reproduction*, 32(5), 969-973. <https://doi.org/10.1093/humrep/dex056>
- Readings, J., Blake, L., Casey, P., Jadva, V., & Golombok, S. (2011). Secrecy, disclosure and everything in-between: Decisions of parents of children conceived by donor insemination, egg donation and surrogacy. *Reproductive BioMedicine Online*, 22(5), 485-495. <https://doi.org/10.1016/j.rbmo.2011.01.014>
- Regalado, A. (2018, February 13). *2017 was the year consumer DNA testing blew up*. <https://www.technologyreview.com/s/610233/2017-was-the-year-consumer-dna-testing-blew-up/>
- Regalado, A. (2020, April 02). *More than 26 million people have taken an at-home ancestry test*. <https://www.technologyreview.com/2019/02/11/103446/more-than-26-million-people-have-taken-an-at-home-ancestry-test/>
- Rights of the Child. (1990, September 2). Retrieved March 22, 2020, from <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Sants, H. J. (1964). Genealogical bewilderment in children with substitute parents. *British Journal of Medical Psychology*, 37(2), 133–142. <https://doi.org/10.1111/j.20448341.1964.tb01981.x>
- Solomon, G. E., Johnson, S. C., Zaitchik, D., & Carey, S. (1996). Like father, like son: Young children's understanding of how and why offspring resemble their parents. *Child Development*, 67(1), 151-171. <https://doi.org/10.2307/1131693>
- Tallandini, M. A., Zanchettin, L., Gronchi, G., & Morsan, V. (2016). Parental disclosure of Assisted Reproductive Technology (ART) conception to their children: A systematic and meta-analytic review. *Human Reproduction*, 31(6), 1275–1287. <https://doi.org/10.1093/humrep/dew068>
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64(4), 678-691. <https://doi.org/10.1037/0022-3514.64.4.678>
- Wydra, M., O'Brien, K. M., & Merson, E. S. (2012). In their own words: Adopted persons' experiences of adoption disclosure and discussion in their families. *Journal of Family Social Work*, 15(1), 62-77. <https://doi.org/10.1080/10522158.2012.642616>

**Figure 1**  
*Misattributed vs Donor Conceived Themes*



**Figure 2**  
*Core Themes Most Frequently Expressed in Both Groups*



**Notes on Contributors**

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*Nicole L. Witherspoon* graduated with her master's in General Psychology in 2016 and has been working in the mental health field for the last 7 years. She has worked in all levels of care with a wide array of clients. She has been involved in multiple research projects and presentations including factors predicting self-blame in male survivors of sexual violence and racial minority individuals' experiences of interfamilial child sexual abuse. She is a third-year student at AIU, California School of Professional Psychology in the Clinical Psychology program and will graduate in 2024 with her Psy.D.

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