



ISSN Print: 2664-8962  
ISSN Online: 2664-8970  
Impact Factor: RJIF 5.44  
IJPR 2023; 5(1): 17-24  
[www.psychiatryjournal.in](http://www.psychiatryjournal.in)  
Received: 03-02-2023  
Accepted: 05-03-2023

**Dr. Lena Barth**  
Department of Psychology,  
Medical School Hamburg, Am  
Kaiserkai 1 20457 Hamburg,  
Germany

## Unveiling the evolution of family creation via sperm donation: Perspectives on family and parenthood throughout the centuries

**Dr. Lena Barth**

**DOI:** <https://doi.org/10.33545/26648962.2023.v5.i1a.57>

### Abstract

The presence of diversity is a valuable resource. It is crucial for social cohesion in a pluralistic society. Despite the diversity in family structures, there is often a tendency to compare parenthood and family to a hegemonic norm. This norm may vary depending on cultural, social, and historical contexts. The study aims to shed light on the topic of family creation through sperm donation in Germany. By conducting qualitative interviews, we investigated specific psychodynamic dimensions highlighting the individual experiences of those who have utilized sperm donation: heterosexual couples facing fertility issues, lesbian couples, and solo mothers. We tried to examine both the differences and similarities among these groups, seeking to understand how they navigate the complexities and challenges associated with alternative family formation. One concept that was explored in relation to these experiences is ambiguity tolerance. With this article, we aim to provide initial insights and offer new perspectives on the concepts and significance of family and parenthood beyond the confines of traditional norms.

**Keywords:** Alternative family models, sperm donation, psychodynamic therapy, qualitative research

### Introduction

The following review presents the first qualitative results of our study on family formation through sperm donation. First, the concept of family and the historical context of family formation through sperm donation are presented. Then we explain how the data were collected and processed, followed by the initial results and a discussion of these. We conclude the work by providing associated implications and provide suggestions for therapeutic work.

### The concept of family

The term "family" has a long tradition in various scientific disciplines. The understanding of family has changed over time against the background of different social, cultural, and historical contexts. Today's "classical" image of the family as a social unit consisting of a father, a mother, and their biological children has been expanded to include various forms of cohabitation, such as patchwork families, same-sex partnerships, single-parent families and foster families (Cherlin, 2010; Stacey & Biblarz, 2001; Kreienbaum & Neises, 2019) [6, 38, 22]. The definition and understanding of the family is closely linked to the social functions it fulfills. According to the ninth family report of the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth, a family is a place where social relationships, care, and social support take place. Other definitions also mention the aspect of producing offspring, providing social and emotional support, raising and socializing children, and transmitting values and norms (Umberson & Williams, 2005) [45]. Some researchers emphasize the importance of biological kinship and genetic ancestry, while others focus on social relationships and emotional ties (Cherlin, 2010) [6]. Culture- and context-specific factors also play an important role in defining family, as family structures and functions may differ in different cultural and social contexts (Stacey & Biblarz, 2001) [38]. Nave-Herz (2019) [30] also offers a comprehensive definition of a family concept. Family is understood as a cross-generational complex of relationships that is associated with a reproductive and

**Corresponding Author:**  
**Dr. Lena Barth**  
Department of Psychology,  
Medical School Hamburg, Am  
Kaiserkai 1 20457 Hamburg,  
Germany

socialization function. The different generations of the family are connected through a special relationship of solidarity and cooperation. This feeling of solidarity goes beyond the usual group characteristics, for example through common goals, a specific structure, and a sense of "we", and includes the promotion and maintenance of education, and the physical and mental health of all families.

### **Perspectives on the concept of the family today**

Despite the diversity and complexity of family relationships over many centuries (step- and patchwork families, single parents, foster families, family formation through sperm and egg donation as well as surrogate motherhood), the concept of family in Germany today often appears to be immobile, while being linked to many social and political expectations. At around 70%, married heterosexual couples represent the most common form of family, even though the number of (unmarried) cohabiting couples is on the rise and already accounts for 11% of all families in 2018 (Familienreport, 2020). The number of single parents has also increased over time and is now represented at 19%. In 2018, the birth rate in Germany was 1.57 children per woman. However, the birth rate in Germany, as in all other European countries, lags behind the desire to have children. Childlessness among female academics is particularly high in Germany in international comparison (e.g., McDonald, 2000) [28].

The currently hegemonic heterosexual nuclear family is characterized by the self-evident coupling of natal, genetic, legal and social parenthood (Peukert *et al.*, 2020) [34]. In public and academic discourses, it is implicitly regarded as the reference, while forms that deviate from it are marked by differentiating designations, such as "rainbow family" (Peukert *et al.*, 2020) [34]. In the German context, relatively little is known about the realities of families beyond the heterosexual nuclear family. The number of rainbow families is also massively underestimated in official statistics. In 2018, there were a total of 130,000 same-sex couples, of which 37,000 were married and 38,000 lived in a registered partnership. Of the eight million families with minor children, only 10,000 were officially rainbow families. The number of single fathers is comparatively low. Of the 13 million underage children in Germany, 15,000 grew up in rainbow households (all figures from the Family Report 2020).

### **The history of starting a family through sperm donation**

The history of starting a family through sperm donation is complex, as it took place exclusively covertly for many centuries. In Europe, artificial insemination of women was reported as early as the 18<sup>th</sup> century. This was followed in the 19<sup>th</sup> century by successful, initially exclusively homologous inseminations, in which the sperm of the spouse was inseminated. In addition, the founding of the society "Do Vitam" in 1880, which dealt with the problems of artificial insemination, and the declaration by the Paris Medical Faculty that artificial insemination was per se "unnatural" and "immoral", seem important. The 20th century was also marked by discourses and opposing attitudes on this topic. In 1959, sperm donation was still called "unworthy of status for moral reasons" and connoted as a contradiction to the order of marriage. More than ten years later, in 1970, heterologous insemination, which refers to the donation of sperm by a third party, was no longer considered "unworthy of the profession", but was "burdened

with numerous problems". According to a resolution of the German Medical Congress, heterologous insemination was not to be recommended. Despite this official assessment, pioneers in Germany such as Dr Gerhard Schaad campaigned for sperm donation. Schaad stated in Bad Pyrmont in 1977 that his clinical work had resulted in more than 4,300 pregnancies. At first, the unclear legal basis was the reason why many clinicians were against the treatment of heterologous donation. In the following years, efforts were made to find a solution to the legal problem. In 1986, the German Jurists' Conference issued a declaration that heterologous insemination treatment was "not immoral and not illegal". In 1998, the Childhood Reform Act was published and established the legal basis for donor sperm children. The previous distinction between legitimate and illegitimate children was abolished, making it easier for non-married heterosexual couples to have children (Katzorke, 2008) [21]. Since then, sperm donation has been permitted in Germany following the Guidelines on the Collection and Transfer of Human Germ Cells in Assisted Reproduction and the Guidelines of the Working Group on Donor Insemination for Quality Assurance of Treatment with Donor Sperm in Germany (Hammel *et al.*, 2006) [17]. For years, the legal situation was unclear, especially with regard to anonymity in the context of sperm donation. On 1 July 2018, the Act on the Regulation of the Right to Know the Parentage in the Case of Heterogeneous Use of Semen (Semen Donor Register Act (SaRegG)) came into force. With the entry into force of the Act, every person over the age of 16 who has been conceived through sperm donation in the context of medically assisted artificial insemination or who suspects that this is the case can apply for information about the stored data from the sperm donor register (cf. SaRegG). The personal data of sperm donors held by the Federal Institute for Drugs and Medical Devices (BfArM) will be stored in the sperm donor register for 110 years. In addition, the new law stipulates that not only heterosexual couples but also homosexual (lesbian) couples as well as solo mothers may officially acquire a sperm donor as part of fertility treatment. According to § 2 a SGB V, the costs of insemination treatment are only covered for married heterosexual couples under 40 years of age who are seeking treatment with their own sperm. Thus, in addition to the opaque legal situation, there is a high financial burden for heterosexual couples outside the described norms, as well as women who want to start a family in the context of a lesbian partnership or solo motherhood.

### **Aspects of starting a family through sperm donation for lesbian couples**

Lesbian couples in Germany have had the right to joint parenthood since 2018. One way to have a child in a lesbian partnership is through sperm donation. However, unlike married heterosexual couples, the child must be adopted by the non-siring parent or the co-mother after birth. There is a comparatively broad body of research on the realization of the desire for children in lesbian couples and their parenthood (e.g. Gabb, 2018; Mamo, 2007) [12, 25]. Features of shared parenthood in a family created through donor insemination (DI) or *in vitro* fertilization (IVF) are explored. In relation to reproductive decisions, there are studies on the choice of sperm donation (Nordqvist, 2014) [32], the decision about a known or anonymous donor (Toureni & Coyle, 2002) [44], and how practices of disclosure to children play

out (Nordqvist, 2014) <sup>[32]</sup>. In addition, some studies look at everyday family actions and strategies (Gabb, 2018) <sup>[12]</sup> and discuss the children's perspectives on their families (Streib-Brzič & Gerlach, 2015) <sup>[42]</sup>. Concerning the division of labor, findings show that lesbian families are characterized by a high degree of equality with regard to shared gainful employment and care work (Dunne, 1999) <sup>[9]</sup>.

Sperm donation leads to a separation of sexuality and procreation of the child. Studies have shown that the donor is often represented as a "third party" in women's fantasies. These ideas can be idealizing on the one hand and persecutory on the other (Naziri & Feld-Elzon, 2012) <sup>[31]</sup>. In addition, women are confronted with being dependent on a third (Known or unknown) person. Many studies show that children who grow up with same-sex parents do not show any disadvantages in terms of development (Rupp, 2009) <sup>[36]</sup>. Hanly (1999) <sup>[18]</sup> also postulates that it is not the "real third party" but the "intersubjective third party" that seems to be important, so that an "oedipal transitional relationship" can take place (Odgen, 2006) <sup>[33]</sup>. A detailed summary of further studies on the group of lesbian couples can also be found in Golombok (2015) <sup>[16]</sup>.

### Aspects of starting a family through sperm donation for solo mothers

A growing number of single women are considering the possibility of becoming mothers without a partnership, with the help of sperm donation ("solo mothers"). In an interview, Constanze Bleichrodt, managing director of the "Cryo-bank Munich", estimates the proportion of solo mothers at 15% of the total counseling sessions of her German company. The treatment of solo mothers appears stigmatized (including in academic discourse), among other things due to the incorrect grouping with single mothers, which is described in many places in the media. Studies suggest that solo mothers and those who want to become one are better (educated) and more likely to have a full-time job than women who are in a relationship and become pregnant naturally (García *et al.*, 2019) <sup>[13]</sup>. Brewaeys (2010) <sup>[3]</sup> also notes that the majority of solo mothers are financially independent, have a good job, and belong to a higher socio-economic milieu. Women seeking solo motherhood are significantly older at the start of medical treatments than women who also use a medically assisted reproductive method and are also in a partnership (Salomon *et al.*, 2015) <sup>[37]</sup>. Solo mothers have to face many ethical questions, socially critical voices, and prejudices (Mayer-Lewis, 2020) <sup>[26]</sup>, while "parenthood at any price" is repeatedly criticized (Fischer, 2012) <sup>[11]</sup>.

### Aspects of starting a family through sperm donation in heterosexual couples

In Germany, almost every tenth couple between the ages of 25 and 59 is involuntarily childless. It is also reported that about every sixth couple experiences difficulty within the child planning process (excerpt from the D-I-R Yearbook 2021, German IVF Register). Infertility is attributed in one-third of cases to male infertility, in another third to female infertility, or as a jointly occurring phenomenon. The former is primarily the subject of our research. Since the 1970s, sperm donation has been a legal form of artificial insemination in Germany under specific conditions and enables many heterosexual couples to fulfil their desire for a child. This form of family formation implies that the child

has a genetic connection to only one parent (Golombok *et al.*, 2015) <sup>[16]</sup>. Within European-American cultures, genetic connectedness continues to be the essential basis of a family foundation, as explained above. Building a family through the conception of donor sperm is therefore a challenge that can put strain on the psyche and partnership. This can cause strong feelings of insecurity and influence both the partnership and one's own attitude to gender roles and identities (Steuber & Solomon, 2008) <sup>[39]</sup>. It can be assumed that infertile fathers develop unconscious fantasies about the sperm donor, i.e. so-called phantasms, against the background of an irritation of their own male self-image in the sense of a narcissistic wound, which have a decisive influence on the development of neurotic symptoms. For example, infertile men are more anxious and less self-confident about raising their children compared to genetic fathers (Cohen *et al.*, 2001; Hjelmstedt *et al.*, 2003) <sup>[7, 19]</sup>. Furthermore, infertile men are concerned that the absence of a genetic relationship may affect the quality of the relationship and attachment to the child (Casey *et al.*, 2013) <sup>[5]</sup>. Despite the social flexibilization of different ways of life, the confrontation with traditionally shaped expectations regarding gender roles is still very visible.

## Methodology

### Sample and recruitment

The sample consists of N = 50 respondents. The subgroups are 12 homosexual (lesbian) couples, 7 heterosexual couples, and 12 solo mothers. All of the test persons come from Germany and have found a family with one or more children with the help of a sperm donor from a third party. The mean age of the total sample is 38.0476 (SD=5.9876), but there are differences within the three groups: Lesbian couples= 36.25 (SD=6.0881), Solo mothers= 40.83 (SD=3.85730) and Heterosexual couples= 39.667 (SD=7.31). The majority of the test persons chose an institutional donation via a sperm bank. The probands used both German and Danish sperm banks and fertility centres. To recruit the sample, corresponding calls were published in social media.

### Interview guide

The interview questions cover the topics of relationship experiences, self-perception and self-image, the childbearing phase and the realization of starting a family, family dynamics, social conditions, values, and priorities in one's own life, and dreams (nightmares and life dreams/wishes). Due to the structure of the interview, the conversations contain both structured and explorative-observational parts. A narrative-interpretative assessment is also possible.

### Conducting the interviews

After the ethics committee decided on 28.06.2022 to give its positive vote, the interviews could be conducted from 01.07.2022 to 30.12.2022 by a clinically trained person using the Microsoft Teams program or at the respondents' place of residence. After the subjects had been informed verbally and in writing about the procedure and the voluntary nature of the study, the individual interviews were conducted using a semi-structured guide. The interviews were audio-documented (Philips Pocket Memo dictaphone) for a duration of 50-90 minutes (M = 67:07 minutes, SD = 10:26 minutes). There was no compensation for

participating in the interviews. After the interviews were completed, they were saved under a pseudonym for further use.

### Transcription

In order to prepare the interviews for further analysis, the audio transcription was done with the F4 software with the help of a compatible foot pedal (Science II USB Footswitch). Verbatim transcription was chosen because here "the content/thematic level is the focus of the analysis and the linguistic expressiveness of the interviewee (s) is rather secondary". Only conversational behavior suitable for analysis was transcribed. Any interactions with children were not transcribed, but their occurrence was indicated at the appropriate place. All other verbal content of the interviews (e.g., spoken words, deliberating or agreeing sounds) were transcribed. Non-verbal contents that represent an expression of facial expressions were not translated (e.g., laughing, crying, irony). Pauses in conversation, overlapping of spoken words and unintelligible words were taken into account accordingly. The transcription rules are borrowed from the F4 manual as well as the Conversation Analytic Transcription System 2 (GAT2).

### Qualitative methodology of the grounded theory methodology

The grounded theory methodology (Strauss, Corbin, Niewarwa, & Legewie, 1996) <sup>[41]</sup> serves as the methodological foundation of the present work. The jointly published mono-graph by Straus and Glaser entitled "The Discovery of Grounded Theory. Strategies for Qualitative Research" is the starting point for the development of different views of grounded theory methodology. Grounded theory has now become an umbrella term that unites different epistemological and methodological positions (Strauss, Corbin, Niewarwa, & Legewie, 1996) <sup>[41]</sup>. Coding is understood in grounded theory as a concept-forming process: the data are broken up, as it were, and condensed into concepts, and finally also into categories. Concepts are found that relate different sections of data to each other and thus make connections recognizable (Strauss, Corbin, Niewarwa, & Legewie, 1996) <sup>[41]</sup>. The methodological approach of grounded theory methodology is based on the premise that "all is data" (Glaser & Holton, 2004) <sup>[14]</sup>. Here, both a process-oriented and a process-open procedure are constituted. In this way, hypotheses, ideas, and theories can be extracted from the existing data material (Breuer, 2020; Mayring, 2019) <sup>[46, 27]</sup> and inductively recorded in the form of open codes and memos (Glaser & Holton, 2004) <sup>[14]</sup>. Emerging ideas, ideas, associations, hypotheses, and theories were recorded in the form of memos during the coding process and later converted into open codes. According to Glaser and Strauss (2010) <sup>[47]</sup>, this procedure encourages the researcher to think creatively and self-reflectively and thus helps him to be able to develop higher-quality material.

### Methodology of qualitative content analysis

Qualitative content analysis is a method for data evaluation in the field of empirical research developed by Philipp Mayring. According to Mayring (2019) <sup>[27]</sup>, qualitative content analysis aims to establish order and structure of manifest (Deductive) and latent (Inductive) content.

Qualitative content analysis is a "systematic and intersubjectively verifiable text analysis method that meets scientific standards despite the need for interpretation and the richness of meaning of linguistic material" (Mayring, 2019) <sup>[27]</sup>. Its central characteristic is the systematic summary of the analysis material, guided by explicit rules and preserving the content, to reduce it to manageable categories. In this process, the analysis categories are directly generated from the empirical material, albeit against a theoretical background. Qualitative content analysis offers the possibility of evaluating communication with a content-analytical approach (Mayring, 2019) <sup>[27]</sup>. The methodology allows data to be systematically analyzed and made intersubjectively verifiable (Mayring, 2019) <sup>[27]</sup>. The systematic approach is distinct from a hermeneutic approach, in which content may be interpreted relatively freely in part (Mayring, 2019) <sup>[27]</sup>. Mayring (2019) <sup>[27]</sup> suggests three basic forms of qualitative content analysis:

**Summary:** The material is reduced in such a way that the essential content is retained, but through abstraction, a manageable corpus is created that still represents an image of the basic material.

**Structuring:** Certain aspects are filtered out of the material and a cross-section of the material is created according to previously defined criteria, or the material is assessed on the basis of certain criteria.

**Explication:** Additional material is brought to individual parts of the text in question in order to broaden understanding.

The analysis is a process and follows defined rules (Mayring, 2019) <sup>[27]</sup>. Consequently, the quality criteria of objectivity, validity, and reliability are also of fundamental importance in qualitative research and can be demonstrated, for example, in the calculation of interrater reliability with the help of Krippendorff's Alpha (Mayring, 2019) <sup>[27]</sup>. In addition, we designed and analysed our data using the qualitative quality criteria according to Steinke (Intersubjective comprehensibility, an indication of the research process, empirical anchoring, limitation, coherence, relevance, reflected subjectivity).

### Qualitative data analysis: development of the codebook and coding

Against the background of grounded theory methodology and qualitative content analysis, a distinction was made in this study between deductive (Structural) codes and inductive (Open) codes. This enables both a text-oriented, explorative approach and a theory-based, psychoanalytical approach. The entire process was accompanied by annotative notes in the form of memos. All codes used were defined, described, delimited, and linked to two anchor examples in a codebook for structural and open codes. In the following, the analysis of the material consists of identifying relevant text passages and linking them to the corresponding code. The entire coding process was supervised and modified in the process. The qualitative analysis took place using the software program Atlas.ti (version 8.3.1).

### Interrater reliability using Krippendorff's Alpha

In order to calculate the quality of the coding, 20% of the randomly selected interview material is obscured and then



coded by a second rater. Finally, the inter-rater reliability is statistically calculated using Krippendorff's Alpha (cu- $\alpha$ ) in Atlas.ti. The final results cannot yet be written up because the study has not yet been completed.

### Initial results and discussion

In the following, we will try to show the first results, which we will link directly to a discussion. All three groups are still being analyzed at the moment. Psychodynamic aspects of starting a family through sperm donation will be presented in lesbian couples, in solo mothers and in heterosexual couples. In each case, a quotation from the interviews has been included for clarification. A summary completes this section.

#### Psychodynamic aspects of starting a family through sperm donation among lesbian couples

Initial results from our qualitative interviews show that there is both a biologisation of motherhood and parenthood in general and an accompanying equation of motherhood and motherliness in society. Lesbian couples are confronted with this attitude and partly discriminated against. Despite the negotiation of social kinship, the concept of kinship in the social context is repeatedly reduced exclusively to blood kinship. The identification of the "biological mother", who has carried the child and is thus the woman with "feminine" characteristics, apparently has the function of a constant - her position itself hardly seems negotiable, not even in the legal sense, in contrast to the current discourse on co-motherhood.

*"I actually never dared to openly say that I wanted to have children, because I assumed that it would never happen and I didn't want to disappoint myself, so I didn't allow the desire." (Quote from a co-mother)*

In addition, our respondents report that the concentration on the specific characteristics of couple love coming from society, the family structure, and the individual biographical history of the mothers make starting a family itself and family life more difficult (See also Tichy & Krüger-Kirm, 2021) [24]. This makes a general critique and questioning of the heteronormative family form (with all the associated gendered images of mother and father) and the visibility of structural political inequalities more difficult for queer families. Despite the many possibilities for different life plans, many academics, such as Thomas Bauer, complain about a social decrease in tolerance for ambiguity. The new family forms offer a projection surface for the observer, which (similar to the phenomenon of "xenophobia") can be both an expression of a low tolerance of ambiguity and at the same time reinforce the need to distance oneself from others in a devaluing way. The concepts of integration, hybridity, and ambiguity are thus opposed by a one-sided, projectively rejecting and non-ambiguous, intolerant social attitude. The latter attitude is the cause of stigmatisation, discrimination, and xenophobia. Within the interviews, these theoretical processes are often mentioned by the interviewees themselves. It seems as if the confrontation with this specific form of discrimination leads to an inner-psychic distance and thus to a self-strengthening position.

In the psychodynamic context, our conversations within this group reveal oedipal phenomena that are independent of gender. Unconscious desire inevitably underlies all caregiving and takes the form of enigmatic messages for the child that form the core of the child's unconscious

(Quindeau, 2019) [35]. The Oedipus complex can be understood as a response to "Verführ-rung": While the child is initially the object of desire, he now makes himself the subject of desire. Embedding the Oedipus complex in a heteronormative nuclear family thus does not seem necessary, because the important thing is that desire is experienced passively and actively. Quindeau goes on to say that it is exclusively important that more than one person can be there for the child in order to enable a triangulation that coexists in same-sex and opposite-sex desire.

In lesbian couple constellations, it is also evident that the couples had the discourse about role and care dynamics very early on. Due to the conscious preparation and mostly egalitarian care structures (e.g. also due to similar incomes of both caregivers), there is little need for discussion and a high tolerance of ambiguity within the partnership. As a critical aspect, it could be argued that there is possibly a bias to the effect that the women also had the desire to present the partnership as ideal in our interviews. In conclusion, the (oedipal) equation of femininity, motherhood, and maternity is deconstructed by lesbian couples, which represents a challenge for society as a whole. Maternity appears, irrespective of gender, as a fundamental form of human care (Krüger-Kirm, 2018) [23].

#### Starting a family through sperm donation among solo mothers

The initial results of the study show structural and institutional experiences of discrimination, which become visible in the form of low financial support, expensive treatment methods, and medical preference for heteronormative "standard families" (similar to Brügge & Simon, 2020; Fischer, 2012) [4, 11]. On a personal level, the solo mothers in this study partly describe social exclusion due to the lack of a father figure. They reported a lack of understanding and critical questioning of the family model. Overall, however, positive, favorable experiences predominate in the comments, which can only be partially confirmed by the available literature (Correia & Broderick, 2009) [8].

Psychodynamically, we mainly looked at aspects of triangulation phenomena. A large proportion of the solo mothers interviewed stated that their child/children and their well-being are most important to them. All solo mothers mentioned that they want to educate their children about procreation through DI and ultimately allow them to have contact with the sperm donor. Other caregivers (Grandparents, friends) also play an important role in the lives of solo mother families. Some solo mothers have consciously introduced the symbolic or real biological father (the sperm donor). The solo mothers' mental representations of the sperm donor were mainly positive. Through the children's close ties to other caregivers, they can develop different triadic relationship structures. As already mentioned in various studies (Brewaeyts *et al.*, 2005; Golombok, 2015; Murray, 2005; Freeman, 2015) [3, 16, 29, 48], it does not seem to be relevant for children whether they are raised by a (Biological and/or social) father. Instead, the general family environment and the quality of attachments and parenting are crucial. The results of this study indicate that solo mothers have a secure bond with their children and do not perceive the involvement of other people in family life as a threat. Instead, they encourage the involvement of other people (including the sperm donor). Some children are

also very aware of the replacement of the social father by their grandfather. All in all, these findings can be interpreted as signs of a possible opening of the mother-child dyads and of given triangulation possibilities as well as a pronounced tolerance of ambiguity.

"And when I look at some couples where I think how they discuss it and how they then decide which type of nappy and how. That's when I get a full-blown crisis. And I think "Ah no, I'm quite happy about that". Um. But then of course there are moments when I miss someone being there. And of course, there are also worries and fears. Like when I'm sick or something. Thank God, so far, it's never been that bad. But um. Yes. But not only when there are difficult situations. Of course, also when there are such great developmental steps, when you're just happy. And where I think "Oh, and if there was someone here right now who was experiencing how [child's name] is growing up and how great he is developing. And how funny and exhausting and beautiful it is. Um (.) Yes. And I think that's allowed to stand side by side." (Quote from a solo mother)

All solo mothers also report an early, deeply rooted desire to become a mother, which, due to external circumstances, only seemed possible this way. Despite high costs, psychologically stressful procedures, and fears of loneliness and excessive demands, strong willpower is shown to realize this wish. Support from the social environment and the networking of like-minded people was often expressed in the conversations. It not only serves the purpose of coping with everyday life, caring for children or exchanging experiences, it can also make an important contribution to the mental stability and resilience of (Not only) solo mothers.

### **Starting a family through sperm donation among heterosexual couples**

The perspectives of experience on the topic within the heterosexual group appear to be very different. The experiences, both between the couples and within the couple dynamics, shed light on different aspects and related feelings. The fathers in our study reveal fears and expressions of low self-confidence in relation to their parenthood (similar to Cohen *et al.*, 2001; Hjelmstedt *et al.*, 2003) [7, 19]. At the same time, there seems to be a psychological representation of unmanliness within the self-image. In addition, implicit expressions of an experience of mortification of the ego ideal reveal the difficulty of integrating the infertility connoted as "unmanly" into one's own masculine ego. Against the background of a changed self-image ("non-performing man"), the first effects on family dynamics become apparent, especially in situations of stress and tension.

The basic psychodynamic assumption of gender identity as nothing unambiguous, but rather as a "container" with different masculine and feminine aspects of the somatic, psychological, and social dimensions seems to feature little in the real life of this specific group (Quindeau, 2019) [35]. The women from this sample generally describe a great desire to have children. There is little talk about the experience of the physical limitation of this desire. Networking and seeking outside support is rarely used within this group. Themes of shame ("Fortunately, one does not recognize it immediately") and guilt ("I cannot fulfill this wish for my wife on my own") play a major role. However, when an open exchange and processing of this is

possible, tolerance of ambiguity emerges, which enables new scope and relationship dynamics:

"I see the sperm donor as a brother in spirit" (Quote from a social father).

### **Conclusion**

In this article, we tried to link the prevailing models of family and parenthood in Germany with a historical context. In doing so, it became clear that the concept of family has been viewed in a variety of ways and always in assimilation with social conditions and historical requirements. The concept of family initially referred to a large group, then to an extended family, with today's model of the so-called nuclear family being the smallest and most individualized unit. In the "classical" sense, the nuclear family is regarded as a heteronormative marriage with one or two children, which politicians use as the reference value to draft new laws. However, the current reality of life increasingly shows a more diverse picture, which is rarely reflected in German social, political and academic discourse.

Diversity is an asset and the acceptance of diversity is central to social cohesion in a pluralistic society. The heteronormative idea of a classical (and thus fertile) family life no longer corresponds to the reality of one in ten heterosexual couples in Germany, who experience difficulties in fulfilling their own desire to have children. In addition, this concept no longer reflects the existing context of many co-existing family models, e.g. that of a family founded through sperm donation. In Germany, more and more fertility treatments are being used: in 1997, more than 6,500 children were born after infertility treatment; in 2020, the figure is already over 22,200 (excerpt from the D-I-R Yearbook 2021, German IVF Register). Despite this significant and constantly growing number, there is a great research desideratum, which points to a still-existing stigma and speechlessness associated with it.

Approaches to intersectionality can provide important explanations for uncovering these differences in the context of gender-equitable reproductive medicine. The decision and realization of a desire to have a child with the help of DI is an intensive process and the stressors are not only located in the inner psychology but are also recognizable above all in the social outside through experiences of discrimination and confrontation with heteronormative ideals (Szymanski & Chung, 2001) [43]. Historically, the family was seen above all as the simplest and most necessary link between different people. The family can be understood as an economic unit that offers protection, but at the same time needs protection from external hostility. Current academic discourse increasingly conceptualizes parenthood as a diverse phenomenon that encompasses procreation, pregnancy, and birth, as well as abortion and (wanted and unwanted) childlessness. This article is intended to provide initial insights and new perspectives on the concepts and meaning of family and parenthood. Thus, the co-mothers in the context of lesbian motherhood report their unique impressions on the topic of motherhood identity, parenthood, and attachment to the (Adopted) child. The solo mothers draw a new picture of the concept of family, how it can be interpreted differently, and how motherhood influences their own life satisfaction. The heterosexual couples provide insights into parenthood in the area of tension between competition and envy (In relation to the sperm donor), frequent speechlessness, and stigmatization.

However, infertility forces couples to rethink their heteronormative and individual life goals (Glover, McLellan & Waver, 2009) <sup>[15]</sup>. Often unimagined, yet creative and ambiguous solutions emerge in this process. These new perspectives reveal less the image of harmonious unity, but rather allow for leeway and ambiguities, e.g., regarding the decoupling of femininity, motherhood, and care. In addition to external dimensions of egalitarian access requirements, inner dimensions, and psychological life skills are also needed for this process. Thus, scholars are designing utopias of families beyond the heteronormative nuclear family, questioning its central importance for the organisation of care relationships (Krüger-Kirn & Tichy, 2021) <sup>[24]</sup>. Forms of life beyond the hegemonic norm of parenthood and family thus point to possibilities of transformative processes that may have already proven to be manifestly efficient in earlier societal times, and thus stimulate thinking about further insights into renegotiations of parenting positions. According to family therapist Jesper Juul, there are no serious differences between heterosexual and homosexual couples and solo families in terms of the quality of their couple relationship and the ability to be a good parent. Important influencing factors such as the life history of the relevant caregivers, traumas suffered, the will to change, or inner and outer characteristics that determine whether someone does a good job of parenting, are therefore independent of age, gender, origin, or sexual orientation (Irle, 2014) <sup>[20]</sup>.

#### Declaration of interest statement

The authors declare no competing interests.

#### References

- Barthes R. The pleasure of the text. Hill and Wang; c1983.
- Besch-Cornelius I. Zur gesellschaftlichen Lage von Frauen. In D. Böhnisch (Ed.), *Familie und Gesellschaft: Beiträge zur sozialwissenschaftlichen Familienforschung*. Leske + Budrich; c1987. p. 43-59.
- Brewaeys A. Review: Parenting and Child Development in Homosexual Parent Families. *Fertility and Sterility*. 2010;93(5):978-982.
- Brügge C, Simon U. Deutsche Samenbanken – Ergebnisse von drei Umfragen des DI-Netzes. In: Beier, K., Brügge, C., Thorn, P., Wiesemann, C. (eds) *Assistierte Reproduktion mit Hilfe Dritter*. Springer, Berlin, Heidelberg; c2020.
- Casey P, Jadv V, Blake L, Golombok S. Families created by donor insemination: Father-child relationships at age 7. *Journal of Family Psychology*. 2013;27(2):243-252.
- Cherlin AJ. *The marriage-go-round: The state of marriage and the family in America today*. Vintage; c2010.
- Cohen J, McCallum F, Pasqualotto F. Results from a pilot study evaluating stress in fertile males and infertile males and females. *Fertility and Sterility*. 2001;76(4):S5.
- Correia H, Broderick P. Access to reproductive technologies by single women and lesbian couples: A review of current laws and regulations. *International Journal of Gynecology & Obstetrics*. 2009;105(2):117-120.
- Dunne GA. What Difference Does 'Difference' Make? Lesbian Experience of Work and Family Life. In: Seymour, J., Bagguley, P. (eds) *Relating Intimacies. Explorations in Sociology*. British Sociological Association Conference Volume Series. Palgrave Macmillan, London; c1999. [https://doi.org/10.1007/978-1-349-27683-7\\_9](https://doi.org/10.1007/978-1-349-27683-7_9)
- Erdheim M. *Das Eigene und das Fremde. Über ethnische Identität. Psyche – Zeitschrift für Psychoanalyse und ihre Anwendungen*, 1992, 46(8).
- Fischer T. *Ethische Aspekte der Donogenen Insemination* (2. Aufl.). Kassel university press GmbH; c2012.
- Gabb J. Researching LGBTQ Families: Methodological Challenges, Current Knowledge, and Future Directions. *Journal of Family Theory & Review*. 2018;10(2):310-325.
- García L. *Lesbian motherhood: Stories of becoming*. Oxford University Press; c2019.
- Glaser BG, Holton J. *Remodeling grounded theory: Qualitative Market, Media, and Opinion Research*, 2004, 2(5).
- Glover L. What does having a fertility problem mean to couples? *Journal of Reproductive and Infant Psychology*. 2009;27(4):380-387.
- Golombok S. *Modern families: parents and children in new family forms*. Choice; c2015.
- Hammel A. (n. D.). *Behandlung mit Spendersamen: Was ist Donogene Insemination?* Retrieved from <https://www.donogene-insemination.de/>
- Hanly C. On Subjectivity and Objectivity in Psychoanalysis. *Journal of the American Psychoanalytic Association*. 1999;47(2):427-444. <https://doi.org/10.1177/00030651990470021301>
- Hjelmstedt A, Widström AM, Wramsby H, Matthiesen AS, Collins A. Personality factors and emotional responses to pregnancy among IVF couples in early pregnancy: a comparative study. *Acta Obstetrica et Gynecologica Scandinavica*. 2003;82:2.
- Irle K, Juul J. *Das Regenbogen-Experiment: Sind Schwule und Lesben die bes-seren Eltern?* Beltz Verlag; c2014.
- Katzorke T. Entstehung und Entwicklung der Spendersamenbehandlung in Deutschland. *Journal für Reproduktionsmedizin und Endokrinologie*. 2008;5(1):14-20.
- Kreienbaum M, Neises C. *Single-Mutter-Kinder: Der Wandel der Familie und die Vielfalt von Familienformen*. In K. Boers & T. Höllrigl (Hrsg.), *Allein erziehend: Single-Mütter und ihre Lebenswelten* (S. 19-34). Beltz Juventa; c2019.
- Krüger-Kirn H, Wolf L. *Mutterschaft zwischen Konstruktion und Erfahrung. Aktuelle Studien und Standpunkte*. Opladen: Verlag Barbara Budrich; c2018.
- Krüger-Kirn H, Tichy LZ. (Hg.) *Elternschaft und Gender Trouble. Geschlechter-kritische Perspektiven auf den Wandel der Familie*. Opladen, Berlin, Toronto: Verlag Bar-bara Budrich; c2021.
- Mamo L. *Queering Reproduction: Achieving Pregnancy in the Age of Technoscience*. Duke University Press; c2007.
- Mayer-Lewis B. *Familiengründung von Frauen außerhalb einer Partnerschaft. Was Solo-Mütter in Deutschland bewegt – eine qualitativ-empirische*

- Untersuchung. In: Beier, K., Brügge, C., Thorn, P., Wiesemann, C. (eds) *Assistierte Reproduktion mit Hilfe Dritter*. Springer, Berlin, Heidelberg; c2020. [https://doi.org/10.1007/978-3-662-60298-0\\_14](https://doi.org/10.1007/978-3-662-60298-0_14)
27. Mayring P. Qualitative Inhaltsanalyse-Abgrenzungen, Spielarten, Weiterentwicklungen. *Qualitative Social Research*, 2019, 20(3).
  28. McDonald P. Gender equity in theories of fertility transition. *Population and Development Review*. 2000;26(3):427-439.
  29. Murray C. Going it alone: Solo mothers and their infants conceived by donor insemination. *The Australian & New Zealand Journal of Family Therapy*. 2005;26(1):9-16.
  30. Nave-Herz R. Familie heute. Wandel der Familienstrukturen und Folgen für die Erziehung. Darmstadt: Wissenschaftliche Buchgesellschaft; c2019.
  31. Naziri D, Feld-Elzon E. Becoming a mother by "AID" within a lesbian couple: The issue of the third. *The Psychoanalytic Quarterly*. 2012;81(3):683-711.
  32. Nordqvist P, Smart C. Relative strangers: Family life, genes and donor conception. Palgrave Macmillan; c2014.
  33. Ogden TH. Reading Loewald: Oedipus reconceived. *International Journal of Psycho-analysis*. 2006;87(Pt 3):651-666.
  34. Peukert A, Teschlade J, Wimbauer C, Motakef M, Holzleithner E. Elternschaft und Familie jenseits von Heteronormativität und Zweigeschlechtlichkeit. *Gender Sonderheft*; c2020.
  35. Quindeau I. Geschlechterspannungen revisited. (Un-) Doing Gender in Psychoanalyse und Psychotherapie In I. Moeslein-Teising, G. Schäfer & R. Martin (Hrsg.), *Geschlechter-Spannungen* (S. 15-27). Gießen: Psychosozial; c2019.
  36. Rupp M, Bergold P. Zusammenfassung. In M. Rupp (Hg.), *Die Lebenssituation von Kindern in gleichgeschlechtlichen Lebenspartnerschaften*; c2009.
  37. Salomon M, Sylvest R, Hansson H, Nyboe Andersen A, Schmidt L. Socio-demographic characteristics and attitudes towards motherhood among single women compared with cohabiting women treated with donor semen - a Danish multicenter study. *Acta Obstetrica et Gynecologica Scandinavica*. 2015;94(5):473-481. <https://doi.org/10.1111/aogs.12619>
  38. Stacey J, Biblarz TJ. (How) does the sexual orientation of parents matter? *American Sociological Review*. 2001;66(2):159-183.
  39. Steuber KR, Haunani Solomon D. Relational uncertainty, partner interference, and infertility: A qualitative study of discourse within online forums. *Journal of Social and Personal Relationships*. 2008;25(5):831-855.
  40. Strauss AL, Corbin JM. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. (2. Aufl.). Sage Publications; c1998.
  41. Strauss AL, Corbin JM, Niewiarra S, Legewie H. *Grounded theory*; c1996.
  42. Streib-Brzić U, Gerlach S. (Year). Und was sagen die Kinder dazu? – Zehn Jahre später! Neue Gespräche mit Töchtern und Söhnen lesbischer, schwuler und trans\* Eltern. Querverlag; c2015.
  43. Szymanski DM, Chung YB. The Lesbian Internalized Homophobia Scale. *Psychology of Women Quarterly*. 2001;25(4):287-299.
  44. Touroni E, Coyle A. Decision-making in planned lesbian parenting: An interpretative phenomenological analysis. *Journal of Community & Applied Social Psychology*. 2002;12(3):194-209.
  45. Umberson D, Williams K, Powers DA, Chen MD, Campbell AM. As good as it gets? A life course perspective on marital quality. *Social Forces*. 2005 Sep 1;84(1):493-511.
  46. Breuer C, Hüffmeier J, Hibben F, Hertel G. Trust in teams: A taxonomy of perceived trustworthiness factors and risk-taking behaviors in face-to-face and virtual teams. *Human Relations*. 2020 Jan;73(1):3-4.
  47. Glaser BG, Strauss AL. *Grounded theory: Strategien Qualitativer Forschung*. Huber; c2010.
  48. Freeman RE. Stakeholder theory. *Wiley encyclopedia of management*, 2015, 1-6.