

Concept Analysis of Fatherhood

Qing Li, Jianli Tian*

Faculty of Nursing, Chengde Medical University, Chengde 067000, Hebei Province, China

*Corresponding author: Jianli Tian, cytianjianli@126.com

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Abstract: *Objective:* To propose a conceptual definition of fatherhood from the perspective of different disciplines and resources. *Background:* The term “Fatherhood” is frequently used in social and health science. Due to the shift of a father’s role from being breadwinner to supporting the family and being involved in raising children, an updated and clear concept of fatherhood is needed. *Design:* Walker and Avant’s methods for concept analysis was used. *Data source:* PubMed, Cumulative Index to Nursing & Allied Health, the Cochrane Library, Embase, Scopus, Google Scholar, online dictionaries, and thesauruses. *Review methods:* The primary search terms were “fatherhood,” “father’s role”, “the role of fatherhood,” and “father’s experience.” The materials reviewed were not limited to research reports but also included books, case study, and reviews. *Results:* Drawing from four key components, a fresh perspective on defining fatherhood is presented. These components include the father-son relationship and interpersonal dynamics within individual, familial, and societal contexts. This definition encompasses a person’s identity as a father, their associated rights and responsibilities in raising children, and the reciprocal processes shaped by societal and cultural influences. It involves identifying distinctive attributes, underlying factors, and resulting outcomes. *Conclusion:* In conclusion, this concept analysis reaffirms the multifaceted nature of fatherhood, highlighting various contributing domains. These insights can prove valuable for future developments in related instruments or theories.

Keywords: Concept analysis; Fatherhood; Fathering

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1. Introduction

Scholarly interest in fatherhood began to emerge in the 1970s and 80s, experienced growth in the 1990s, and has been enriched over the past two decades through efforts to elucidate how fatherhood can be understood as a socially constructed concept that has evolved historically ^[1,2]. Fatherhood is important to men, children and families. Father involvement can be analyzed in the context of marital status, race, residency status, coparenting relationships, and relationships between fathers and their children ^[2].

Over the last three decades, the role of fathers has undergone significant changes. These changes can be attributed to various factors, including the increased participation of women in the workforce, improved family financial conditions, greater gender equality, the emergence of diverse family structures and living arrangements, the impact of digital parenting through social media, and the evolution of contemporary child-

rearing philosophies ^[3-7].

The noticeable transformation of a father's role from the traditional archetype of being the breadwinner, disciplinarian, and adhering to authoritarian behaviors to the modern, more involved style of fathering characterized by co-parenting, caregiving, and openly affectionate roles necessitates a redefinition and re-envisioning of the concept of fatherhood ^[4,6,8-10].

2. Methodology

Concepts are the basic building blocks in theory construction, and concept analysis involves examining the structure and function of a concept ^[11]. Walker and Avant's concept analysis method is selected as the framework for this analysis due to its linear, straightforward, and rigorous approach. The steps involved in this method are as follows: (i) Selecting a concept to analyze, (ii) specifying the aims or objectives of the analysis, (iii) identifying all known uses of the concept, (iv) determining the defining attributes of the concept, (v) identifying a model case that exemplifies the concept. (vi) identifying cases that are borderline, related, contrary, invented, or illegitimate in relation to the concept, (vii) identifying the antecedents and consequences associated with the concept, (viii) defining empirical referents for the concept.

3. Results

3.1. Step 1: Selecting a concept

Although there has been increasing research on fatherhood from different ethnic, racial, cultural, and economic backgrounds in recent years, the scientific usage of the word "fatherhood" is still somewhat ambiguous. In 2003, an analysis of the concept of "the role of fatherhood" was conducted from a Japanese perspective. This analysis depicted "father's role" as a cultural entity encompassing values, attitudes, and behaviors. This role held the responsibility for family members within a father-mother-child system ^[8]. Nonetheless, this analysis did not provide a clear definition of "fatherhood" along with its defining attributes. It is crucial to note that the role of fathers is perceived to evolve in response to changing times, diverse cultures, and varying social conditions ^[8]. Therefore, it is essential to undertake a concept analysis of fatherhood to gain a deeper understanding of the significance of a father's role, behavior, and engagement.

3.2. Step 2: Determine the objectives of analysis

This concept analysis aims to clarify the meaning of fatherhood, develop a holistic and more in-depth understanding of fatherhood from different disciplines and resources, as well as provide a grounding that can support related instrument or theory development in the future.

3.3. Step 3: Identifying all uses of the concept

Suggestion by Walker and Avant included identifying as many uses of the concept as possible through dictionaries, thesauruses, available literatures, and even friends and colleagues ^[11]. In this concept analysis, the main online dictionaries and thesauruses used were Oxford Dictionary, Cambridge Dictionary, Collins Dictionary, Webster's New World College Dictionary, American Heritage[®] Dictionary of the English Language, and Urban Dictionary. Besides, a comprehensive search of the relevant literatures from 1990 to 2022 was undertaken in the following electronic databases: PubMed, Cumulative Index to Nursing & Allied Health (CINAHL), the Cochrane Library, Embase, Scopus, and Google Scholar. were "fatherhood," "father's role", "the role of fatherhood," and "father's experience."

A total of 1,184 articles in English, retrieved through computer search, had their titles and abstracts reviewed. Among them, 33 results (including 8 in sociology, 5 in anthropology, 5 in nursing, 4 in psychology, 3 in medicine, 2 in religious, 2 in biology, 2 in management, 2 in politics and law articles) were examined in detail. To capture both the implicit and explicit aspects of the concept, the materials reviewed encompassed various types of sources, including research reports, books, case studies, and reviews.

In dictionaries and thesauruses, “fatherhood” is defined as “the status_of being a father” [12,13], “responsibility of being a father” [14], the qualities or character or spirit of a father (synonyms include paternity, fathering, fathership, caregiving, caretaking, raising, rearing, and upbringing) [15-17] and the kinship relation between an offspring and the father (synonyms includes family relationship and kinship) [13,15]. American Heritage® Dictionary of the English Language defines “fatherhood” as “fathers considered as a group” [16]. In anthropology, “fatherhood” also refers to “relatedness or connection by blood or marriage or adoption” [15]. A person enters fatherhood when they become a father. This most commonly happens when their child is born, but it can also happen through adoption or by marrying or becoming a partner to someone with children. Less commonly, “fatherhood” can refer to the status of a religious leader, and God when considered as the first person in the Trinity [15,18]. Urban Dictionary describes “fatherhood” as a male parent, one who loves, supports, guides, inspires, and encourages his children, and a man who is emulated, admired and very loved [19]. The definition or description of fatherhood in different disciplines are shown in **Table 1**.

Table 1. The definition or description of fatherhood from different disciplines

References	Definition or description of fatherhood	Discipline
Dempsey & Hewitt, 2012 [24]; Lut et al., 2022 [5]; Valiquette-Tessier et al., 2019 [3]	Fatherhood means the range of gendered parenting practices, discourses, and identities available to biological or social fathers who are engaged emotionally and fulfil a fathering role in various “hands-on” ways in their children’s care, such as a stepfather.	Sociology
Collier, 2018 [33]; Huang, 2014 [6]; Marsiglio <i>et al.</i> , 2000 [1]	Fatherhood is a cultural and social construct that encompasses the rights and responsibilities of fathers within the context of family policy. It is shaped by various sociocultural processes and is often framed in terms of a dichotomy between men’s public and private roles, encompassing their commitments, responsibilities, and dependencies.	
Gregory & Milner, 2011 [10]; Marsiglio <i>et al.</i> , 2000 [1]	Fatherhood is a reflection of the interpersonal processes that lead to developmental outcomes among fathers and children, and an identity that is part of a reciprocal process negotiated by men, children, mothers, and other interested parties.	
Kotelchuck, 2022 [39]	As a life course developmental achievement, fatherhood is not a singular point but a profoundly human experience that occurs over time and across generations.	
Gettler, 2014 [34]	Fatherhood means raising offspring, paternal care, and behavioral plasticity in terms of their willingness to engage with and respond to infants.	Anthropology
Lupton & Barclay, 1997 [31]	Fatherhood is described as a worthy ambition, a demanding challenge, and perhaps the ultimate creative pursuit in terms of tremendous changes in men’s marriage and family life.	
Grebe <i>et al.</i> , 2019 [32]; Lupton & Barclay, 1997 [31]	Fathers’ interactions and negotiations with their partners, children and other family members have been seen as central to individual’s construction of the meaning of fatherhood.	
Imaz, 2017 [25]; Ziv, 2020 [38]	For lesbian, gay, bisexual, and transgender (LGBT) families, despite the diversity in the legislation and the differences in historical, social and cultural situations across countries, becoming a father, either alone or as part of a same-sex couple, is a more difficult, convoluted and expensive process than it is for a woman to become a mother, either alone or as part of a same-sex couple. Gay dads rest their fatherhood not on their reproductive contribution or social gender but rather on their masculine gender identification and shape their parental role drawing on elements of contemporary fatherhood.	
Baldwin <i>et al.</i> , 2018 [27]; Pirani & Karmaliani, 2015 [30]	As an important or landmark achievement in an individual’s life, fatherhood refers to being a father, fulfilling their role as “men,” changed priorities and responsibilities in the family, strengthened family ties, and how men perceived themselves as they became fathers.	Nursing
Sansiripun <i>et al.</i> , 2015 [41]; Spector, 2006 [42]	The journey into fatherhood included three phases (labor, delivery, and beginning of a family), and men applied strategies to manage their needs and concerns to deal with emotional and situational changes throughout the process, aiming to develop into masterly fathers.	

Table 1.(continued)

References	Definition or description of fatherhood	Discipline
Genesoni & Tallandini, 2009 ^[9] ; Habib, 2012 ^[12]	The fatherhood transition phase involves distinct psychological processes. It begins with psychological reorganization as the fatherhood status emerges during the prenatal period, followed by a mix of emotions including helplessness, anxiety, and pleasure during labor and birth. In the postnatal period, fathers often grapple with balancing personal and work needs alongside the new demands of their fatherly role. This transition can be seen as a journey of readjustment to a new self-image, the formation of a triadic family relationship, and adaptation to a new social role.	Psychology
Carneiro et al., 2017 ^[40]	For gay men, there are a variety of pathways to fatherhood, such as co-parenting, adoption, fostering, or surrogacy. However, gay couples are evaluated by others as being less emotionally stable and less competent parents.	
Darwin et al., 2017 ^[29]	Most fathers had emphasized that being a “good father” was synonymous with being a “good partner,” and “protecting the partnership,” which was inherent in navigating fatherhood.	
Kohl et al., 2022 ^[20] ; Paoli et al., 2018 ^[22] ; Sherr, 2010 ^[21]	While fathers can be biological or adoptive adult males, the essence of fatherhood lies in their overall reproductive potential, the likelihood of becoming parents, and their engagement in all facets of family life. Owing to the development of medicine, assisted reproductive technology (ART) has increased the chance of fatherhood for men.	Medicine
Aune, 2010 ^[44] ; Piechowski-Jozwiak & Bogousslavsky, 2018 ^[37]	As a Christian evangelical movement in the United Kingdom, Newfrontiers began in the 1970s and has been negotiating the tension between older authoritarian and a newer egalitarian fatherhood. Fatherhood is often depicted as a significant avenue for contemporary men to express their nurturing instincts and share equal parenting responsibilities with their female partners. It also plays a crucial role in shaping their self-identity as masculine figures, both in their familial roles and their work roles. Active involvement in family life is seen as central to embodying the concept of “true manhood,” and absentee fathers are deemed unacceptable because human fatherhood is expected to reflect God’s fatherhood.	Religious
Gettler, 2014 ^[34]	When discussing the relevance to evolutionary perspectives on the biology of fatherhood, testosterone in men, as one of neurobiological-endocrine pathways, has been played a significant fathering role in the course of hominin evolution. Fatherhood is a result of natural selection to attune males’ physiological systems to father-child interaction.	Biology
Kotelchuck, 2022 ^[39]	There are some evidences showing paternal brain structure changes with active fatherhood among animals, such as prairie voles and human paternal brain plasticity is associated with greater paternal care-taking involvement, especially in the social-cognitive pathway network (e.g., the amygdala-superior temporal sulcus brain connectivity), which partly allows men to better infer infant mental states from their behavior.	
Gatrell et al., 2021 ^[23] ; Stellner, 2021 ^[26]	Fatherhood refers to both the status of being a father and the activities associated with fathering. Contemporary generations of employed fathers appear to envision a fuller relationship between fatherhood and employment compared with previous generations who traditionally assume high paternal work-orientation or pure breadwinner role. So, inadequate organizational support for involved fathering may negatively impact employed fathers’ performance and experiences in both their father and employee roles, whereas the statement that fatherhood improves leadership behaviors adds an important component to understand what could make a good male manager.	Management
Gregory & Milner, 2011 ^[10]	Due to broader societal changes, attention to the rights of children, and ethical debates about surrogacy or assistive technologies, fatherhood in politics and law has undergone considerable change in these years. Overall, fatherhood is defined as biological, legal, and ethical approaches to <u>filiation</u> , which seek to establish property <u>rights</u> relating to genetic fatherhood and social fatherhood.	Politics and Law
Lukic, 2016 ^[35]	Under the logic of “filiarchal” culture in Philippine, father becomes the symbol of all power and its parody. Political theories with philosophical considerations of fatherhood attempted to break off the biological and political realms in order to prevent political tragedy.	

3.4. Step 4: Determining the defining attributes

In this step, the cluster of attributes or characteristics that are the most frequently associated with the concept after identifying all uses of it are gathered^[11]. The defining attributes of fatherhood that appear consistently in the dictionaries and literatures are as follows.

- (i) The status of father-child bonding

A person enters fatherhood when becoming a father with or without blood connection^[3,5,12,13,15,20-23]. Although bonding with the child is a subjective feeling state of “love” for the child, father-child connection

or relationships can be strengthened in this way ^[2,28]. Efforts to optimize the quality and amount of paternal sensitivity can promote father–child attachment ^[2].

(ii) Interpersonal relationship among individual, family and others

Fatherhood could be the kinship relation between an offspring and the father ^[13,15,29,30]. The process of fatherhood is constructed by fathers' interactions and negotiations with their partners, children, mothers, and other interested parties ^[1,10,31,32].

(iii) Responsibility of supporting and protecting the child

There are five generic stereotypes of fatherhood that are recurrent in the literatures and dictionaries, which regarded father's status as (a) financial providers; (b) role models, guides, moral teachers, or educators; (c) caregivers; (d) protectors; and (e) disciplinarians ^[1,3,6,10,14,19,33-35]. The roles of contemporary fatherhood emphasize that fathers take a more nurturing and more engaged responsibility in sharing the work of caregiving with their partners and emotionally supporting the child ^[3,9,36].

Despite facing numerous challenges, men are able to adapt their lifestyles, make adjustments to their new roles, and find ways to balance the demands of work with their responsibilities as fathers ^[6,24,33]. Physically and emotionally, fatherhood also includes providing safety when needed, seeking health related information for the family and protecting the children from harm ^[15,37].

In this analysis, the concept of fatherhood can be defined as a status of father-child bonding and interpersonal relationship among individual, family and others, which involves a person's paternal identity, right and responsibility of supporting the child, and a reciprocal process constructed in social and cultural settings.

3.5. Step 5: Identifying a model case

A model case is an example of the use of the concept that demonstrates all the defining attributes of the concept, and it may be actual examples in real life, found in the literature or constructed by the researcher ^[11]. The following case is an actual example from the researcher's real life which contains all of the defining attributes of fatherhood:

Alice is a 5-year-old girl, and her father, Mr. Fu, works in an architectural design company. On a Saturday morning, he refused the workmate's invitation to attend a dinner party because he has promised Alice to go to the amusement park together with her mother (interpersonal relationship among individual, family, and workmates). On the way to the park, Mr. Fu talked with his daughter happily, told her an interesting story and even sang a song together with her (the status of father-child bonding). When they arrived at the park, Mr. Fu bought the tickets, carried their belongings and helped his wife take care of their daughter (responsibility of supporting the child). He frequently reminded the daughter of drinking water in case dehydration from the hot weather. When his daughter was shy to join other children to play games, Mr. Fu encouraged her. At the same time, he kept an eye on his daughter at a nearby place when she was playing to ensure her safety (responsibility of protecting the child).

3.6. Step 6: Identifying borderlines, related, contrary, invented, and illegitimate cases

Borderline cases are those examples or instances that contain most of the defining attributes of the concept being examined but not all of them ^[11]. The following is a real borderline case example that happened in China:

Mr. Liu had been living with his 2-year-old son (Tom) together after divorcing with his wife one year ago (the status of father-child bonding). Sometimes Mr. Liu's parents helped him take care of Tom, but the grandmother was hospitalized due to the heart disease last month (interpersonal relationship between individual

and family). Unfortunately, the company that the Mr. Liu had been working at for 5 years went bankrupt and he became unemployed. Considering the financial burden and the less intimate relationship he had with his son, Mr. Liu left him at the railway station in another city at a mid-night, hoping that someone could adopt Tom (lack of responsibility of supporting and protecting the child).

Related cases are instances of concepts that are similar or related to the concept being studied but that do not contain all the defining attributes ^[11]. The following example of “simulated caregiving” illustrates a similar case of fatherhood, but it involves only emotional desirable characteristics as a father rather than three defining attributes:

Mike is a 19-year-old boy and studies at a nursing school. Last week, he participated in a child care training program of and learned how to take care of children along with his classmates. Through the teacher’s guidance and good teamwork, Mike finished the lessons successfully and enjoyed the experience of bottle-feeding, bathing, changing diapers and playing games with a 9-month-old girl. On his way to school, he told one of his friends: “The baby is so fun and much prettier than I expected. I even want to have my baby soon.”

Contrary cases are cases are not related to the concept. In the following case, there are no defining attributes towards the concept of fatherhood:

John spent 100,000 dollars on buying a robot that can cook for the family, clean the house, play games with children, and talk to everyone at home.

Invented cases are cases that contain ideas outside our own experience and not all concept analyses need invented cases, and illegitimate cases give an example of the concept term used improperly or out of context ^[11]. In this analysis, the concept of fatherhood was clearly exemplified through the cases presented and there was no need to present the invented and illegitimate cases.

3.7. Step 7: Identify antecedents and consequences

Antecedents are those events or incidents that must occur or be in place prior to the occurrence of the concept ^[11]. Consequences, on the other hand, are those events or incidents that occur as a result or outcomes of the occurrence of the concept ^[11]. The concept analysis has identified the following antecedents and consequences of fatherhood.

3.7.1. Antecedents

- (i) An alive child or perceiving the unborn baby as a human being ^[8].
- (ii) Paternal or parental identity: this is a reflection of the change in an individual’s role within the social structure, integrating with personality characteristics and beliefs related to fathering ^[9,28,38].
- (iii) Attitude and motivation for engaging with and responding to children as a father ^[5,21,34].

3.7.2. Consequences

- (i) Positive consequences: developmental achievement in one’s life ^[27,39], improved parenting competences ^[40-42], psychological maturation ^[34,40], strengthened family bond ^[28,30], decreased infant mortality, decrease in child abuse and antisocial behavior, and improved children’s cognitive outcomes ^[5,29,34,39,40].
- (ii) Negative consequences: stress from the parenting responsibility ^[27], paternal anxiety or depression ^[42-43], employed fathers’ inadequate work performance ^[26].

3.8. Step 8: Define empirical referents

Empirical referents are categories of actual phenomena that by their existence or presence demonstrate the occurrence of the concept itself ^[11]. They are not tools to measure the concept, and they are the means by which

you can recognize or measure the defining attributes ^[11]. The following observable phenomenon of “fatherhood” have been reported commonly in the literature.

For the status of father-child bonding, face-to-face communication, being available in the same or next room, accessibility to respond to child’s requests, time spent with the child and hugging them can be recognized by the degree to which the father behaves in these ways ^[2,5,32,40].

For interpersonal relationship among individual, family and others, affectionate touch and gaze towards infants, involvement in child’s activities, level of intimacy with the child, sharing the work of caregiving with their partners (e.g., bathing, playing, changing diapers, feeding, putting children to sleep, caretaking during the night, and driving the children to kindergarten), participating in household chores (e.g. preparing meals, cleaning the house, shopping, and doing the laundry), and parenting problem solving can be measured in different levels ^[2,6,8,10,27,33,44].

The responsibility of supporting and protecting the child can measured in terms of financial support, planning childcare, decision making, work-life balance, comforting and communicating with the child, guiding and disciplining the child, providing safe living environment, protecting the child from detrimental forces, seeking health related information for the child, organizing health appointments, take care of sick children, monitoring children’s whereabouts and activities, and encouraging them emotionally ^[6,9,10,32,35].

4. Implications for nursing discipline

In nursing practice, understanding the concept of fatherhood is crucial for nurses and midwives as it impacts the delivery of family-centered perinatal healthcare. This approach goes beyond addressing only women’s health needs and extends to encompass the well-being of partners and newborns. Furthermore, in the field of pediatric nursing, recognizing the father’s role and involvement in child-rearing allows nurses to provide essential emotional and physical support during a child patient’s recovery. To facilitate this, various strategies like engaging in family activities and offering family-focused health education can be employed. In nursing research, this concept analysis of fatherhood confirms a multi-faceted concept of fatherhood with a number of contributing domains. It can provide a basis for other empirical researches on fatherhood or fathering in health care and contribute to the related measuring instrument development and theory development in the future. Besides, the quality of fathering and some interventions of strengthening the fatherhood by health professionals could be explored in the future. In nursing education, armed with a deep understanding of fatherhood, nurses and midwives can employ appropriate assessment and use some approaches to ensure father or expectant father’s involvement in perinatal care and children’s health promotion. Notably, in-depth knowledge about fatherhood should be provided in nursing curriculums, especially obstetrics nursing and pediatric nursing, in order to educate the nursing students in terms of the updated family-centered health promotion, and even paternal nursing might be new trend for nursing education reform.

5. Summary

This concept analysis has provided some clarity on the frequently used concept of fatherhood. It confirms a multi-faceted concept with a number of contributing domains, which can benefit the future research and discussion. However, most of the fatherhood literatures were related to the role of fathering or father’s engagement or responsibility and some interventions of strengthening the fatherhood could also be explored. Because fatherhood is a dynamic concept, further evolution of the concept is required as theoretical and empirical researches emerge.

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Marsiglio W, Amato P, Day RD, et al., 2000, Scholarship on Fatherhood in the 1990s and Beyond. *Journal of Marriage and Family*, 62(4): 1173–1191,
- [2] Henry JB, Julion WA, Bounds DT, et al., 2020, Fatherhood matters: An Integrative Review of Fatherhood Intervention Research. *The Journal of School Nursing*, 36(1): 19–32. <https://www.doi.org/10.1177/1059840519873380>
- [3] Valiquette-Tessier S-C, Gosselin J, Young M, et al., 2019, A Literature Review of Cultural Stereotypes Associated with Motherhood and Fatherhood. *Marriage & Family Review*, 55(4): 299–329. <https://www.doi.org/10.1080/01494929.2018.1469567>
- [4] Seward RR, Stanley-Stevens L, 2014, Fathers, Fathering, and Fatherhood Across Cultures. *Parenting Across Cultures*, 459–474.
- [5] Lut I, Harron K, Hardelid P, et al., 2022, ‘What About the Dads?’ Linking Fathers and Children in Administrative Data: A Systematic Scoping Review. *Big Data & Society*, 9(1): 20539517211069299.
- [6] Huang P, 2014, Fathering and Fatherhood in Guangzhou City, China: How Older and Younger Men Perceive and Experience Their Role as Fathers, thesis, University of Warwick.
- [7] Szymańska P, 2021, Parental Internet Activity and Communication Through the New Media-Literature Review. *Kwartalnik Naukowy Fides et Ratio*, 48(4): 211–235.
- [8] Iwata H, 2003, A Concept Analysis of the Role of Fatherhood: A Japanese Perspective. *J Transcult Nurs*, 14(4): 297–304. <https://www.doi.org/10.1177/1043659603256456>
- [9] Genesoni L, Tallandini MA, 2009, Men’s Psychological Transition to Fatherhood: An Analysis of the Literature, 1989–2008. *Birth*, 36(4): 305–318,
- [10] Gregory A, Milner S, 2011, What is “New” about Fatherhood? *Men and Masculinities*, 14: 588–606.
- [11] Walker LO, 2019, *Strategies for Theory Construction in Nursing/Lorraine Olszewski Walker, Kay Coalson Avant (6th Edition)*, Pearson, New York.
- [12] Fatherhood, n.d., In *Cambridge Advanced Learner’s Dictionary & Thesaurus*, Cambridge.
- [13] Fatherhood, n.d., in *Oxford Dictionary*, Oxford.
- [14] Fatherhood, 2014, in *Collins English Dictionary (12th Edition)*, Harper Collins Publishers.
- [15] Fatherhood, n.d., In *Webster’s New World College Dictionary (4th Edition)*, Houghton Mifflin Harcourt.
- [16] Fatherhood, 2022, In *American Heritage® Dictionary of the English Language (Fifth Edition)*, Harper Collins Publishers.
- [17] Fatherhood, 2013, In *Roget’s 21st Century Thesaurus (Third Edition)*, The Philip Lief Group.
- [18] Fatherhood, n.d., In *Dictionary*. <https://www.dictionary.com/browse/fatherhood>
- [19] Fatherhood, 2015, in *Urban Dictionary*
- [20] Kohl PL, Krauss MJ, King C, et al., 2022, The Impact of Responsible Fatherhood Programs on Parenting, Psychological Well-Being, and Financial Outcomes: A Randomized Controlled Trial. *Family Process*, 61(3): 1097–1115.
- [21] Sherr L, 2010, Fathers and HIV: Considerations for Families. *J Int AIDS Soc.*;13(Suppl 2): S4. <https://www.doi.org/10.1186/1758-2652-13-s2-s4>
- [22] Paoli D, Pallotti F, Lenzi A, et al., 2018, Fatherhood and Sperm DNA Damage in Testicular Cancer Patients. *Front Endocrinol (Lausanne)*, 9: 506. <https://www.doi.org/10.3389/fendo.2018.00506>

- [23] Gatrell C, Ladge JJ, Powell GN, et al., 2021, A Review of Fatherhood and Employment: Introducing New Perspectives for Management Research. *Journal of Management Studies*, 59(5): 1198–1226. <https://doi.org/10.1111/joms.12771>
- [24] Dempsey D, Hewitt B, 2012, Fatherhood in the 21st Century. *Journal of Family Studies*, 18(2–3): 98–102. <https://doi.org/10.5172/jfs.2012.18.2-3.98>
- [25] Imaz E, 2017, Same-Sex Parenting, Assisted Reproduction and Gender Asymmetry: Reflecting on the Differential Effects of Legislation on Gay and Lesbian Family Formation in Spain. *Reprod Biomed Soc Online*, 4: 5–12. <https://doi.org/10.1016/j.rbms.2017.01.002>
- [26] Stellner B, 2021, Effects of Fatherhood on Leadership Behaviour of Managers. *International Journal of Organizational Leadership*, 10(4): 367–384. <https://doi.org/10.33844/ijol.2021.60598>
- [27] Baldwin S, Malone M, Sandall J, et al., 2018, Mental Health and Wellbeing During the Transition to Fatherhood: A Systematic Review of First-Time Fathers' Experiences. *JBIS Database System Rev Implement Rep*, 16(11): 2118–2191. <https://doi.org/10.11124/jbisrir-2017-003773>
- [28] Habib C, 2012, The Transition to Fatherhood: A Literature Review Exploring Paternal Involvement with Identity Theory. *Journal of Family Studies*, 18(2–3): 103–120,
- [29] Darwin Z, Galdas P, Hinchliff S, et al., 2017, Fathers' Views and Experiences of Their Own Mental Health During Pregnancy and the First Postnatal Year: A Qualitative Interview Study of Men Participating in the UK Born and Bred in Yorkshire (BaBY) Cohort. *BMC Pregnancy Childbirth*;17(1): 45. <https://doi.org/10.1186/s12884-017-1229-4>
- [30] Pirani L, Karmaliani R, 2015, Experiences of Fatherhood from an Urban Setting of a Middle Income Country. *International Journal of Nursing Education*, 7(2): 147–152. <https://doi.org/10.5958/0974-9357.2015.00093.8>
- [31] Lupton D, Barclay L, 1997, *Constructing Fatherhood: Discourses and Experiences*, Sage Publications, California.
- [32] Grebe NM, Sarafin RE, Strenth CR, et al., 2019, Pair-Bonding, Fatherhood, and the Role of Testosterone: A Meta-Analytic Review. *Neurosci Biobehav Rev*, 98: 221–233. <https://doi.org/10.1016/j.neubiorev.2019.01.010>
- [33] Collier RS, 2018, Fatherhood, Gender and the Making of Professional Identity in Large Law Firms: Bringing Men into the Frame. *International Journal of Law in Context*, 15: 68–87,
- [34] Gettler LT, 2014, Applying Socioendocrinology to Evolutionary Models: Fatherhood and Physiology. *Evolutionary Anthropology: Issues, News, and Reviews*, 23(4): 146–160.
- [35] Lukic A, 2016, *The Tragedy of Fatherhood: King Laius and the Politics of Paternity in the West* by Silke-Maria Weineck. *Goethe Yearbook*, 23(1): 312–314.
- [36] Villamor NJE, de Guzman AB, Matienzo ET, 2018, Look Who is Talking Now: Eliciting the Concept of Fatherhood Among Filipino Fathers Using Metaphor Analysis. *J Nurs Res*, 26(1): 36–43. <https://doi.org/10.1097/jnr.0000000000000201>
- [37] Piechowski-Jozwiak B, Bogousslavsky J, 2018, Couvade Syndrome - Custom, Behavior or Disease? *Front Neurol Neurosci*, 42: 51–58. <https://doi.org/10.1159/000475686>
- [38] Ziv A, 2020, Lesbian Fatherhood. *Lambda Nordica*, 25(1): 81–86.
- [39] Kotelchuck M, 2022, The Impact of Fatherhood on Men's Health and Development, in *Engaged Fatherhood for Men, Families and Gender Equality*, Springer, Cham, 63–91.
- [40] Carneiro FA, Tasker F, Salinas-Quiroz F, et al., 2017, Are the Fathers Alright? A Systematic and Critical Review of Studies on Gay and Bisexual Fatherhood. *Frontiers in Psychology*, 8: 1636.
- [41] Sansiriphun N, Kantaruksa K, Klunklin A, et al., 2015, The Journey Into Fatherhood: A Grounded Theory Study. *Nurs Health Sci*, 17(4): 460–466. <https://doi.org/10.1111/nhs.12216>
- [42] Spector AZ, 2006, Fatherhood and Depression: A Review of Risks, Effects, and Clinical Application. *Issues in Mental Health Nursing*, 27(8): 867–883. <https://doi.org/10.1080/01612840600840844>

- [43] Bamishigbin Jr ON, Schetter CD, Stanton AL, 2019, The Antecedents and Consequences of Adolescent Fatherhood: A Systematic Review. *Social Science & Medicine*, 232: 106–119.
- [44] Aune K, 2010, Fatherhood in British Evangelical Christianity: Negotiating with Mainstream Culture. *Men & Masculinities*, 13(2): 168–189. <https://doi.org/10.1177/1097184X10390027>

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