



Examining the Relationship between Parents' Spiritual Health and the Desire to Have Children: A Systematic Review



Rasoul Raesi^{1,2} , Hossein Shamsi Gooshki^{3,4}, Seyed Saeed Tabatabaee^{5,6}, Abolfazl Khoshi^{3,4}, Seyed Hassan Saadat⁷, Salman Daneshi⁸, Saied Bokaie⁹ and Kiavash Hushmandi^{7,*} 

¹Department of Public Health, School of Health, Torbat Jam Faculty of Medical Sciences, Torbat Jam, Iran

²Department of Health Services Management, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran

³Medicine, Quran and Hadith Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

⁴Department of Medical Ethics, Faculty of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran

⁵Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

⁶Department of Management Sciences and Health Economics, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran

⁷Nephrology and Urology Research Center, Clinical Sciences Institute, Baqiyatallah University of Medical Sciences, Tehran, Iran

⁸Department of Public Health, School of Health, Jiroft University of Medical Sciences, Jiroft, Iran

⁹Department of Food Hygiene and Quality Control, Division of Epidemiology & Zoonoses, Faculty of Veterinary Medicine, University of Tehran, Tehran, Iran

Abstract:

Introduction: The relationship between the spiritual health of parents and their desire to have children is a research area with wide implications for individuals, families, and society.

Objective: The present study was conducted to determine the relationship between parents' spiritual health and desire to have children.

Methods: This systematic review was conducted based on the PRISMA statement in the winter of 2023 without a time limit. Persian articles were searched using the keywords spiritual health, parenting, and parenting in Magiran, Iran Medex, SID, and Irandoc databases. Also, the databases of PubMed, Google Scholar, ISC, Scopus, and Web of Science were searched for English articles with the keywords Spiritual health, childbearing, and parents.

Results: Finally, 14 articles were included in the study. The findings showed that the factors affecting the spiritual health of parents include three basic axes, which include beliefs and values formed in parents, religious practices and traditions, institutionalization in the family, and social support for the family. Also, the findings showed that the factors affecting parents' desire to have children include three basic axes, which are: parents' biological and evolutionary factors, sociocultural influences, and parents' psychological and emotional issues.

Conclusion: Spiritual health and its various factors can play an important role in parents' decisions about having children. Therefore, national managers and policymakers are advised to integrate the dimensions of spiritual health with the overall well-being of the family so that informed decisions of parents can be expanded towards having children.

Keywords: Health, Spiritual health, Family, Parents, Childbearing.

© 2025 The Author(s). Published by Bentham Open.

This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International Public License (CC-BY 4.0), a copy of which is available at: <https://creativecommons.org/licenses/by/4.0/legalcode>. This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

* Address correspondence to this author at Nephrology and Urology Research Center, Clinical Sciences Institute, Baqiyatallah University of Medical Sciences, Tehran, Iran Email: Kiavash.hushmandi@gmail.com

Cite as: Raesi R, Gooshki H, Tabatabaee S, Khoshi A, Saadat S, Daneshi S, Bokaie S, Hushmandi K. Examining the Relationship between Parents' Spiritual Health and the Desire to Have Children: A Systematic Review. Open Public Health J, 2025; 18: e18749445376606. <http://dx.doi.org/10.2174/0118749445376606250225050204>



Received: December 13, 2024
Revised: January 26, 2025
Accepted: February 6, 2025
Published: March 03, 2025



Send Orders for Reprints to
reprints@benthamscience.net

1. INTRODUCTION

1.1. Spiritual Health

Spiritual health is a crucial dimension of overall human health, referring to a state of balance and harmony in one's relationship with oneself, others, nature, and a higher power or spirituality. This dimension encompasses a sense of purpose in life, an understanding of existential meaning, inner peace, and the ability to cope with life's challenges through spiritual or faith-based resources. Spiritual health is not necessarily tied to a specific religion but can include personal and inner experiences related to transcendental concepts [1, 2]. The concept of spiritual health is multidimensional and integrates the physical, emotional, psychological, and social dimensions of wellness. It involves caring for and nurturing the spirit, finding purpose, and connecting with a greater sense of meaning and satisfaction in life [2, 3]. The relationship between spirituality and health has garnered increasing attention as research indicates that positive beliefs, comfort, and strength derived from spiritual practices can contribute to overall well-being and may even facilitate recovery. While the exact nature of the connection between spirituality and health is not fully understood, it is evident that body, mind, and spirit are interconnected, and the health of one of these elements can influence others [3, 4]. Enhancing spiritual health may not necessarily cure diseases, but can help individuals feel better, cope with stress, and prevent certain health issues [5].

Spiritual health is achieved when individuals feel at peace in life, even finding hope and comfort in challenging circumstances, and are able to derive meaning and purpose from their experiences. This is a deeply personal and individual aspect of wellness that different people achieve through various practices and beliefs. For some, spirituality is closely tied to religious traditions, while others may find it through activities such as being in nature, helping others, or engaging in self-reflection. Regardless of specific sources of spiritual well-being, nurturing and maintaining spiritual health is recognized as a vital component of a holistic approach to health [6, 7]. In the context of healthcare, recognizing and addressing individuals' spiritual health is increasingly considered an integral part of providing comprehensive and patient-centered care. Healthcare professionals are encouraged to acknowledge the potential impact of spiritual beliefs on an individual's health and well-being and to support patients in maintaining and enhancing their spiritual health as part of a holistic approach to healthcare. This may include open and respectful discussions about spiritual beliefs, providing access to spiritual support, and integrating spiritual care into treatment plans when necessary [8, 9]. Spiritual health is a multifaceted concept that encompasses various dimensions, including religious, individualistic, and material worldviews. According to a qualitative study in Iran, spiritual health is characterized by several key features, including its impact on physical, psychological, and social health; preference over other

aspects of health; religious and existential approaches; manifestation in individuals' behaviors; and its dynamic nature. Additionally, spiritual health is often described as a dynamic state that can be enhanced through appropriate lifestyle choices, connections with others, questioning the meaning and purpose of life, and transcendence [10, 11]. Moreover, spiritual health is not limited to religious practices. It can be attained through various means, such as connecting with nature, helping others, and engaging in self-reflection [12]. The interplay between spiritual health and physical, psychological, and social well-being is a recurring theme in the literature. Spiritual health is not an independent element but is deeply intertwined with an individual's overall well-being. The body, mind, and spirit are interconnected; improving spiritual health can even aid in the healing process of an illness and help cope with pain and related challenges. Although spirituality may not directly cure physical ailments, it can significantly influence an individual's ability to manage their health and well-being [13, 14].

In the realm of spiritual health, the dimensions of personal, social, environmental, and transcendental connections are often highlighted. Spiritual health is achieved when individuals feel at peace with life, find hope and comfort in challenging situations, and can derive meaning and purpose from their experiences. This holistic approach to spiritual well-being emphasizes the importance of nurturing the spirit and finding greater satisfaction and connection in life. The benefits of spiritual health are extensive and include creating a sense of purpose, belonging, inner peace, mindfulness, and hope, even in the face of adversity. Spirituality is not limited to religious ideals and beliefs [14]. It is a deeply personal and unique aspect of an individual's well-being that encompasses the ideals and beliefs shaped throughout their life. Therefore, there is no single path to achieving spiritual health, and individuals may find spirituality through various means such as organized religion, nature, music, art, or humanity in general [15, 16]. Thus, it can be said that spiritual health is a complex and multifaceted concept that encompasses religious, individualistic, and material worldviews. It is deeply connected to an individual's overall well-being and impacts physical, psychological, and social health. Spiritual health is attained through various means and is not limited to religious practices. Instead, it is a deeply personal and unique aspect of well-being that helps find meaning, hope, and inner peace in life. By recognizing the interconnectedness of body, mind, and spirit and nurturing spiritual health, individuals can experience a greater sense of purpose, resilience, and overall satisfaction in their lives. Consequently, the relationship between spirituality and health is complex and not fully understood; attention to spiritual health at various levels of society and its promotion through comprehensive health approaches has increasingly gained importance. By fostering and supporting an individual's spiritual health, greater purposefulness, resilience, hope for life, and overall satisfaction can be created in people's lives.

1.2. Childbearing

The desire for childbearing refers to the psychological and demographic concept of an individual's or couple's motivation and intention to have children. The desire to childbearing is often considered a key predictor of fertility behavior and can significantly impact decisions related to the timing and number of children [17, 18]. However, beyond the personal realm, the significance of having children extends to the social, economic, and emotional fabric of society. The promotion of national indicators and the achievement of a country's future goals depend on the development and age structure of its population, and this important issue can be addressed by focusing on the concept of childbearing and striving to facilitate conditions that influence couples' desires for childbearing [19, 20]. The impact of social and familial pressures on the desire for childbearing is one of the important aspects of demography and sociology. Social norms and cultural expectations often play a role in shaping individuals' views on parenthood [21, 22]. Additionally, pressure from family members, especially parents and spouses, in the form of a desire for grandchildren can influence the decision-making process. These external influences can create a complex dynamic for individuals and couples as they navigate their own desires alongside others' expectations [23, 24]. Research has shown that the decision to have or not have children can have profound implications for the well-being of individuals and couples. Having children in a family not only leads to significant changes in family structure but also plays an important role in the structure of society. They shape the future of a country and contribute to community development. Additionally, children bring joy, love, and a sense of purpose to families, enriching parents' lives [22, 24]. Throughout history, population growth has been essential for the advancement and success of civilizations. From ancient times to the present, societies have relied on a growing population for survival, prosperity, and innovation. Population growth has played a significant role in shaping our world through an expanding workforce, increased knowledge-despite varying perspectives-and ensuring the continuity of humanity. Population growth can positively impact the economy; as the population increases, the labor force expands, ultimately leading to higher productivity and economic returns [25-27]. In recent years, many countries have faced declining birth rates. Various factors contribute to this trend, including changing social norms, increased access for women to educational and employment opportunities, economic uncertainty, and rising costs of raising children. These factors have led to shifting social priorities, resulting in fewer individuals choosing childbearing or delaying family formation [27, 28]. While declining birth rates may initially seem like a relief from concerns about overpopulation, they carry significant consequences. A declining population can lead to an aging society and put pressure on healthcare systems and social security programs. It can also hinder economic growth since a smaller workforce may potentially lead to labor shortages and decreased productivity [18, 24, 29].

Demographic changes, particularly declining fertility rates in Iran, have led to significant shifts in the age structure of the population [17]. The total fertility rate decline may be associated with increased use of contraceptive methods, couples' willingness to plan families,

aspirations for higher education, addressing economic challenges, religiosity, and familism [18, 30]. The reduction in population and increase in the number of elderly individuals result in a lack of economic and social vitality within communities and confront governments with reduced labor forces [31, 32]. There is a significant positive relationship between legal support and willingness to bear children [33]. Population policies that can implement programs facilitating parents' roles alongside their social roles can be much more effective [25]. On the other hand, implementing educational programs to improve attitudes, promote positive subjective norms, and enhance parental empowerment factors can play a major role in increasing willingness for childbearing [27].

1.3. The Relationship Between Parents' Spiritual Health and Desire for Childbearing

The desire for childbearing is a complex demographic concept that depends on numerous individual and social factors. One of the individual and social components that impact family and community health is the concept of spiritual health [4]. Spiritual health is a human concept that has garnered increasing attention in recent years. The role of parents' spiritual health in shaping their desire for childbearing is another important sociological factor that affects the overall population structure. The relationship between spirituality and the decision to have children is a multifaceted and nuanced area of study, with implications at the individual, family, and societal levels [17, 18]. The intersection of spirituality and parenthood raises profound questions about individuals' motivations and fundamental desires when contemplating family formation. The significance of spiritual health in this context is emphasized by its potential to provide a framework for understanding life's purpose, ethical considerations, and the values individuals seek to pass on to their children. Examining the relationship between parents' spiritual well-being and their desire for childbearing is crucial for gaining a deeper understanding of the factors that shape reproductive choices and family dynamics [3, 34]. Furthermore, with ongoing global demographic trends, examining the impact of spiritual beliefs on fertility intentions is becoming increasingly important as family formation and childbearing patterns change. This is particularly relevant in contemporary society, where diverse religious and spiritual affiliations intersect with evolving concepts of family, gender roles, and individual autonomy [35, 36]. Understanding the reciprocal impact between spiritual health and the desire for parenthood can provide valuable insights into the evolving landscape of family dynamics and contribute to informed discussions about reproductive decision-making [4, 12]. Studies have shown that parents' spiritual health affects their children's spiritual well-being, and parents' spiritual health can play a significant role in strengthening and developing the family foundation [37, 38]. Additionally, research findings indicate that parental religiosity indirectly impacts adolescents' well-being through various mechanisms, such as encouraging healthy behaviors and providing access to health benefits associated with religion. The strength of this influence may vary as adolescents age and gain more personal independence [37, 39]. Exploring the relationship between parents' spiritual health and their desire for childbearing has

implications for public health and policy formulation. By investigating this relationship, insights can be gained into potential ways to support individuals in their reproductive choices while addressing the psychological and emotional dimensions of family planning [39]. Moreover, understanding how spiritual well-being influences fertility intentions can aid in developing sensitive and inclusive reproductive health programs and interventions that consider the diverse spiritual and religious contexts of individuals and communities. Parenthood is a transformative journey that often compels individuals to reflect on their spiritual beliefs and values [37, 39]. The concept of spiritual health encompasses feelings of connection, purpose, and meaning in life, playing an essential role in shaping an individual's approach to parenting. Understanding the relationship between parents' spiritual health and their desire to have children can illuminate motivations for family formation and provide insights into factors influencing this decision [40-42].

While there is a growing body of literature exploring the individual concepts of spiritual health and desire for childbearing, there is a notable lack of research examining the relationship between these two constructs, particularly in the context of parents or prospective parents. Existing studies have primarily focused on the impact of spiritual health on general well-being, mental health, and coping mechanisms, as well as the socio-economic, cultural, and psychological factors influencing the desire for childbearing. However, the potential interplay between parents' spiritual health and their desire for childbearing remains underexplored. Given these considerations, the necessity of comprehensively examining the relationship between parents' spiritual health and their desire for childbearing becomes evident. By exploring this complex interaction, researchers can clarify the deep motivations and values underlying family formation decisions. Furthermore, such exploration has the potential to inform clinical practice, public health initiatives, and policy development, thereby contributing to a more comprehensive understanding of reproductive decision-making and family well-being. Thus, the relationship between parents' spiritual health and their desire to have children represents a compelling area of research with broad implications for individuals, families, and society. By uncovering the intricate links between spirituality and fertility intentions, researchers can clarify the multifaceted nature of reproductive decision-making and contribute to developing supportive frameworks that honor the diverse spiritual dimensions of individuals' lives. This systematic review study was conducted with the aim of determining the relationship between parents' spiritual health and their desire for childbearing.

1.4. Determining Research Objectives and Key Questions

This systematic review study was conducted to determine the relationship between parents' spiritual health and their desire for childbearing. This research examines the existing literature to identify factors related to parents' spiritual health and its connection to the desire for childbearing. The study addresses the main research topic using the following two key questions that shape the overall framework of this systematic review:

[1] What are the factors influencing parents' spiritual health

based on past studies?

[2] What are the factors influencing parents' desire for childbearing based on past studies?

2. RESEARCH METHODOLOGY

2.1. Search Strategy

This systematic review was conducted in the winter of 2023 by searching for Persian articles using the keywords "spiritual health," "childbearing," and "parents" in domestic databases including Magiran, Iran Medex, SID, and Irandoc, as well as searching for English articles using the keywords "Spiritual health," "childbearing," and "parents" in databases such as PubMed, Google Scholar, ISC, Scopus, and Web of Science without time limitations. The inclusion criteria for the studies were as follows: study type (such as cross-sectional, correlational, and review studies), study population (parents or couples of reproductive age), language (studies published in English or Persian), and full-text availability (studies for which the full text was accessible) and the relevance of the article to the research objectives. The exclusion criteria included low-quality studies (studies that received a low-quality score in the qualitative assessment). The search strategy to obtain relevant studies was conducted based on the PRISMA statement. A total of 342 article titles were obtained using the mentioned keywords and appropriate search strategy. Due to overlap among some databases and simultaneous indexing of an article in multiple databases, many duplicate titles were removed using EndNote software, leaving 201 articles. Abstracts were then displayed. After applying inclusion criteria, 109 abstracts were excluded. The full text of the 92 remaining articles was reviewed. Seventy-eight articles that were not related to the overall objectives of the study and the target group were set aside. Ultimately, 14 articles were selected and used in this research (Fig. 1). To ensure a rigorous and unbiased evaluation of the articles in this systematic review, the qualitative assessment was conducted independently by two reviewers. In cases of disagreement between the reviewers, a third reviewer or group discussion was employed to reach a consensus. The PRISMA statement was utilized as a standardized reporting framework, which facilitated the quality assessment process and enhanced the transparency of the review. To assess the quality of the articles, the following criteria were applied: Internal Validity included evaluating the proper design and execution of the study, the use of valid methods for measuring spiritual health and the desire for childbearing, and the appropriate control of confounding factors; External Validity focused on the generalizability of the results to other populations or conditions and the appropriateness of sampling to ensure it was representative of the target population; Reliability assessed the reproducibility of the methods used and the adequacy of the reliability and validity of the measurement tools; Reporting Transparency emphasized the complete reporting of methodological details and results, as well as adherence to standardized reporting guidelines PRISMA; and Conflict of Interest involved evaluating the presence or absence of any conflicts of interest that might influence the study's results. These criteria were rigorously applied to select high-quality studies, ensuring the validity and reliability of the systematic review's findings.

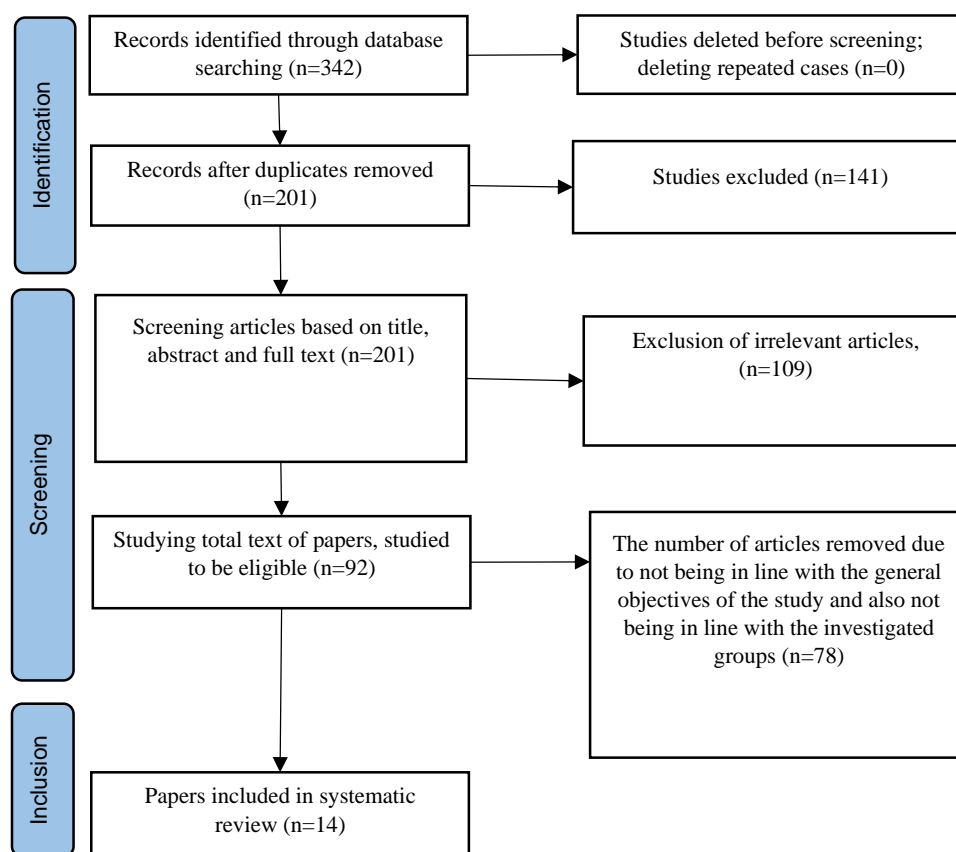


Fig. (1). Search and screening process of selected articles based on PRISMA guidelines.

3. RESULTS

After screening and removing duplicate and irrelevant articles, a total of 14 articles were included in the study. The details of the articles reviewed in this systematic review are presented in Table 1.

The findings indicated that the factors influencing parents' spiritual health include three main axes: the beliefs and values formed in parents, the religious

practices and traditions institutionalized within the family, and social support for the family. Additionally, the findings showed that the factors influencing parents' desire for childbearing comprise three main axes: biological and evolutionary factors affecting parents' willingness to have children, socio-cultural influences on parents' desire for childbearing, and psychological and emotional issues faced by parents regarding their desire for childbearing (Table 2).

Table 1. Characteristics of articles used in the present study.

Row	Author(s)	Year	Study Method	Key Findings	Reference
1	Ghasem Mohammadyari	2012	The study involved 185 children (95 boys and 90 girls) and one parent from each child in Khoy, Iran. The General Health Questionnaire (Goldberg, 1972) was used to assess children's mental health, while the Spiritual Intelligence Questionnaire (Abdollahzadeh <i>et al.</i> , 2008) was employed to measure parents' spiritual intelligence. Demographic information was collected using a questionnaire.	The study found that children's mental health varies based on parents' spiritual intelligence. Higher spiritual intelligence in parents correlates with better mental health in children. Parents' spiritual intelligence also differs based on their education level. Gender and age had no impact on parents' spiritual intelligence.	[3]

(Table 1) contd....

Row	Author(s)	Year	Study Method	Key Findings	Reference
2	Azita Jaberi <i>et al.</i>	2019	This study utilized Walker and Avant's concept analysis method to classify vital features of spiritual health, which include transcendence, purposefulness, meaningfulness, loyalty, harmonious interconnectedness, integrative power, multidimensionality, and holism.	Vital features of spiritual health include transcendence, purposefulness, meaningfulness, loyalty, harmonious interconnectedness, integrative power, multidimensionality, and holism. Spiritual well-being is a fundamental aspect of health that requires further investigation.	[4]
3	Aira Virtala <i>et al.</i>	2005	Survey of 5030 students under 35 years in Finland with a response rate of 62.7%.	About 7.5% of students had children; nearly 90% expressed a desire to have children. Financial satisfaction or completed education did not negatively correlate with parenthood. Environmental and work conditions hindered their childbearing actions despite being at an ideal age for having children.	[20]
4	Cong Liu <i>et al.</i>	2023	Qualitative study based on content analysis from interviews with 40 parents.	The policy encouraging more children did not significantly affect couples' willingness to have more children. The desire for childbearing reflects individual aspirations when potential barriers are ignored. Supportive measures related to living costs and social stereotypes should be considered to promote parents' willingness to have more children.	[24]
5	Zadehahmad <i>et al.</i>	2018	Cross-sectional study with 269 women visiting health centers in Torbat Heydarieh, Iran.	A positive and significant relationship was found between the desire for childbearing and spiritual health, while no significant statistical relationship was observed between childbearing desire and health literacy. Strengthening women's spiritual health is essential to increase their desire for childbearing.	[12]
6	Karimi <i>et al.</i>	2023	Study of newly married couples visiting counseling centers in western Tehran in 2021.	A significant positive correlation exists between spiritual well-being and marital satisfaction as well as attitudes toward childbearing, with spiritual well-being predicting a portion of the variance in both marital satisfaction and attitudes toward childbearing, highlighting the need for attention to spiritual well-being in demographic and health sectors.	[15]
7	Lynn Clark Callister <i>et al.</i>	1999	A descriptive phenomenological study exploring cultural meanings of childbearing among Jewish women.	Participants emphasized the importance of obeying religious laws regarding childbearing, describing childbirth as a bittersweet paradox often accompanied by feelings of power. Religious beliefs help women develop deeper insights into the meaning of childbearing and its emotional dimensions.	[43]
8	Gholampour	2021	Studies show the significant impact of parents' spiritual health on children's mental health.	The findings indicated that higher parental, spiritual health leads to better mental health outcomes for children, emphasizing the role of parental spiritual well-being in fostering children's development and family success in maintaining children's mental health through parental support and nurturing environments.	[37]
9	Meghdadi <i>et al.</i>	2016	Conceptual analysis using Islamic texts to address research questions about parenting roles.	The existential capacity of children necessitates that parents act as primary nurturers, maintaining their child's spirit through care based on Islamic teachings, which emphasize the negative consequences of neglecting children's spiritual health on their overall well-being and family dynamics.	[44]
10	Goli	2015	A descriptive study examining Islamic resources regarding parenting roles in fostering self-esteem.	The study indicates that self-esteem is crucial for achieving psychological peace; Islamic teachings provide strategies for parents to foster self-esteem in their children, which ultimately enhances both children's and parents' spiritual health through moral and educational objectives outlined in religious texts.	[45]
11	Heravi <i>et al.</i>	2020	Document analysis exploring the impacts of single-child families on parents.	Although religious teachings do not directly address single-child families, they emphasize the importance of childbearing; single-child families are seen as problematic due to various physical, psychological, educational, and spiritual harms associated with having only one child, including increased anxiety and decreased family cohesion.	[46]
12	Keshavarz <i>et al.</i>	2011	Survey-based study focusing on married women aged 20-49 in Isfahan.	Delays in childbearing were linked to women's power within the family, education level, age, religious inclinations, family income, and socio-economic status; specifically, women's power within the family was positively correlated with fertility rates according to several theoretical frameworks discussed in the research context.	[47]
13	Piltan <i>et al.</i>	2015	Study using document analysis and survey methods to test hypotheses about fertility intentions.	Multiple factors such as religiosity, spirituality, gender socialization, desired number of children, group participation, and political engagement significantly influence fertility intentions; increasing maternity leave and supportive policies can positively impact population growth amidst economic challenges faced by families today due to inflation and unemployment concerns.	[48]
14	Ghasemi	2018	Survey among married women aged 18-50 in Ahaz using cluster sampling.	Social factors influencing childbearing include parental characteristics, spouse's age and education level; changing these factors affects couples' decisions regarding the number of children and spacing between births; cultural behaviors surrounding fertility are shaped over time, necessitating long-term planning across various life stages for increasing birth rates among women.	[49]

Table 2. Fundamental axes of spiritual health formation and desire for childbearing in parents along with subcategories of each axis.

Fundamental Axes of Spiritual Health Formation and Desire for Childbearing in Parents	Factors Affecting the Spiritual Health of Parents	Beliefs and Values Formed in Parents			
		Religious Practices and Traditions Institutionalized in the Family			
		Social Support for the Spiritual Health of the Family			
	Factors Influencing Parents' Desire for Childbearing	Biological and Evolutionary Factors of Parents in Their Desire to Have Children	Genetic Predisposition	Genetic Influences on Parents' Desire to Have Children	
				Candidate Genes and Parental Behavior in the Desire to Have Children	
			Desire for Self and Kin Development	Theoretical Framework of Reproductive Fitness in Parents' Desire to Have Children	
				Evolutionary Importance of Parents' Desire to Have Children	
			Hormonal Influences	The Role of Oxytocin in Parents' Desire to Have Children	
				The Role of Testosterone in Parents' Desire to Have Children	
			Parental Genetic Investment	The Level of Parental Investment in Time, Energy, and Resources for Transmitting Their Genes to the Next Generation	
Social Factors Influencing the Evolution of Parenting Behavior				Cultural Diversity in Parents' Desire to Have Children	
			Social Norms and Expectations in Parents' Desire to Have Children		
Evolution of Parental Behaviors		Evolutionary History of Parenting in Parents			
	Modern Human Parenting Behaviors Compliance				
Cultural and Social Influences on Parents' Desire to Have Children	Cultural Perceptions of Parenting				
	The Role of Religion and Tradition				
	Social and Economic Influences				
	Social Support and Community Norms				
	Historical and Political Factors				
	Gender Roles and Parental Responsibilities				
	Access to Family Planning and Reproductive Health Services				
	Media and Cultural Influences				
	Psychological and Emotional Issues of Parents in Their Desire to Have Children	Biological Requirements of Parents			
Emotional Fulfillment					
Social Expectations and Cultural Norms					
Identity and Personal Legacy					
Emotional Readiness and Life Fulfillment					
Emotional Attachments and Intergenerational Bonds					
Acceptance of Parenting Roles as a Source of Personal Growth					
Fear of Regret and Missed Opportunities					
The Role of Parenting Patterns and Childhood Experiences					

Table 3. Relationship between parents' spiritual health and desire for childbearing.

Main Axes of Parents' Spiritual Health	Subcategories of Spiritual Health	Relationship with Desire for Childbearing
Beliefs and Values Formed in Parents	- Religious and spiritual beliefs - Family and moral values	- Increased desire for childbearing due to religious beliefs that consider childbearing sacred. - Strengthening family values and the desire to expand the family.
Religious Practices and Institutionalized Traditions in the Family	- Performing religious rituals - Participating in spiritual ceremonies	- Increased desire for childbearing due to religious traditions emphasizing childbearing and raising children within a religious framework.
Social Support for the Family's Spiritual Health	- Support from religious communities - Spiritual social networks	- Increased desire for childbearing due to social and spiritual support for families with children.

Table 4. Factors influencing the desire for childbearing and their relationship with parents' spiritual health, categorizing them into cultural/social, psychological/emotional, and biological/evolutionary dimensions.

Factors Influencing Desire for Childbearing	Subcategories of Desire for Childbearing	Relationship with Parents' Spiritual Health
Cultural and Social Factors	<ul style="list-style-type: none">- Role of religion and traditions- Social norms and cultural expectations	<ul style="list-style-type: none">- Parents' spiritual health increases the desire for childbearing through a religious and traditional emphasis on childbearing.- Spiritual social norms reinforce childbearing as a value.
Psychological and Emotional Factors	<ul style="list-style-type: none">- Personal growth and identity- Emotional readiness and life satisfaction	<ul style="list-style-type: none">- Parents' spiritual health enhances emotional readiness and life satisfaction, which in turn strengthens the desire for childbearing.- Childbearing is viewed as part of personal identity and legacy.
Biological and Evolutionary Factors	<ul style="list-style-type: none">- Desire for self and kin development- Parental genetic investment	<ul style="list-style-type: none">- Parents' spiritual health strengthens the desire for self and kin development through spiritual values.- Parental investment in children is seen as part of spiritual responsibility.

Table 3 illustrates the relationship between parents' spiritual health and their desire for childbearing, breaking down the main axes of spiritual health and their subcategories, along with how they influence the desire to have children.

Table 4 highlights how parents' spiritual health influences the desire for childbearing across multiple dimensions, demonstrating its profound impact on reproductive decisions.

4. DISCUSSION

The present systematic review study aimed to determine the relationship between parents' spiritual health and their desire to have children. The findings indicated that the factors affecting parents' spiritual health include three main axes: beliefs and values formed in parents, religious practices and traditions institutionalized in the family and social support for the family. Additionally, the findings revealed that the factors influencing parents' desire to have children consist of three primary axes: biological and evolutionary factors affecting parents' desire to have children, cultural and social influences on parents' desire to have children and psychological and emotional issues of parents regarding their desire to have children. The discussion section will further explore each of these axes and the components related to the mentioned axes.

4.1. Factors Affecting Parents' Spiritual Health

4.1.1. Beliefs and Values Formed in Parents

The spiritual beliefs and values formed in parents significantly influence the upbringing and development of their children. As individuals who transmit their values and beliefs to their offspring, parents have a considerable capacity to impact the spiritual and moral growth of their children. Spiritual beliefs and values serve as a fundamental part of personal identity, playing a crucial role in shaping human character [20, 50]. Parents with strong spiritual values are typically able to transfer these values to their children, demonstrating them as living examples of these principles. This can aid in the moral and spiritual development of children, guiding them along a path that reinforces spiritual values [51]. The importance of spiritual beliefs and values in parents establishes a solid foundation for family relationships. These beliefs and

values can act as a common language for communication between parents and children, fostering a sense of unity and togetherness within the family. This can enhance children's self-esteem, reduce family conflicts, and increase awareness of ethical and spiritual issues [52]. Moreover, spiritual beliefs and values can serve as a strong guide for children in facing life's difficulties and challenges. Parents with strong spiritual values can prepare their children to confront life's challenges by instilling these values in them and directing them towards solutions based on spiritual principles [53]. With this brief description of the importance of spiritual beliefs and values in parents, it is evident that this topic is one of the most significant influencing factors in the upbringing and development of children. It can play a vital role in shaping children's character and ethics while enhancing awareness and communication within the family. Therefore, examining and paying attention to this subject is highly significant, as it can contribute to improving family relationships and enhancing the mental health of society [54]. Additionally, it should be noted that due to the extensive impact of spiritual beliefs and values on family life, this topic holds importance not only at the family level but also at the community level. Parents with strong spiritual values can actively contribute to society by transmitting these values to their children, fostering a spiritually-oriented and human-centered environment [55]. Furthermore, adhering to spiritual values and beliefs can act as a powerful guide in children's life choices. When faced with important decisions and life challenges, children's achievements and choices are often shaped by their spiritual beliefs. Thus, parents can assist their children in making better decisions by providing living examples of how to apply spiritual values in their lives [56]. Finally, it is essential to recognize that the importance of spiritual beliefs and values in parents leads to introducing profound spirituality and ethical thinking within society. This topic can help create a dynamic community that promotes moral and spiritual growth while nurturing generations with strong spiritual motivations and values [57]. In other words, the significance of spiritual beliefs and values in parents contributes to establishing a solid foundation for family relationships, fostering children's moral and spiritual growth, as well as supporting social development within communities. Given its impactful nature, this subject

requires more study and attention from both parents and society so that this potential can be utilized effectively [58]. Considering the importance of spiritual beliefs and values in parents, it is crucial for them to pay close attention to this matter and continuously strive to convey their spiritual values and beliefs to their children. Additionally, communities should regard this issue as one of their primary goals for social and cultural development while promoting spiritual values within society. Given the potential influence of these beliefs on families and communities, as well as their connection with levels of awareness, ethical growth, and societal spirituality, it is essential for parents, educational institutions, and NGOs to collaborate in promoting these values so they can secure an appropriate place within child-rearing processes and community development [59, 60]. In conclusion, it can be asserted that parental beliefs and values have a direct and undeniable impact on children's growth and upbringing. Parents with strong spiritual values can facilitate establishing a solid foundation for family relationships while promoting children's moral and spiritual development, ultimately contributing to creating spiritually-oriented human communities. Conversely, neglecting this issue may lead to diminished family connections, lower self-esteem levels among children, and hindered social development within communities. Therefore, the significance of parental beliefs and values from both individual and societal perspectives is substantial, thus requiring ongoing attention and development. Henceforth, focusing on this matter while promoting these values within families and society can enhance the quality of life as well as foster healthy growth among children and communities overall.

4.1.2. Religious Practices and Traditions Institutionalized in the Family

Engaging in religious rituals and traditions is one of the primary ways to enhance spiritual health in many religions. Studies have shown that regular participation in religious activities is associated with improved mental health, reduced depression and anxiety, increased life satisfaction, and overall mental well-being [61, 62]. Regular participation in religious activities and performing religious rituals are linked to improved mental health and increased spiritual well-being. Since parents play a crucial role in shaping the personality and mental health of their children, their spiritual health can significantly impact their offspring. Engaging in these rituals and traditions provides an opportunity for reflection, contemplation, and a sense of connection with the Creator, thereby enhancing the spiritual health of parents and positively affecting other aspects of their mental well-being [63]. As mentioned, spiritual health plays an important role in individuals' overall well-being, and participating in religious rituals and traditions is one of the main ways to strengthen and promote spiritual health. In this regard, research has indicated that religious practices and traditions can serve as a source for strengthening the spiritual connection between parents and their children. These practices typically include worship, ceremonies,

religious beliefs, and methods of spiritual education that are carried out in the family's daily life [64]. In other words, through religious practices and traditions, parents can teach their children religious values and beliefs while reinforcing their own spiritual connection with God. Additionally, religious traditions can serve as guidance in family decision-making and solving everyday problems. Furthermore, these practices can positively influence the mental health of parents, making them more resilient in facing life's challenges. Spiritual rituals often provide a framework for individuals to cultivate their spiritual well-being. Investigating how religious practices affect parents' spiritual health can provide deeper insights into the role of faith and tradition in their decisions regarding childbearing [65].

4.1.3. Social Support for the Spiritual Health of the Family

Spiritual health is a multidimensional concept that includes psychological, spiritual, and social aspects, referring to the extent of feelings, connections, and meaning in relation to God, others, and ourselves. Therefore, spiritual health reflects a positive relationship with God and others, having meaning and purpose in life, feelings of intimacy and hope in the face of challenges, and the ability to evaluate personal values and beliefs [24]. While social support is recognized as a significant factor in maintaining and enhancing mental and spiritual health, the impact of this support on parents' spiritual health is also of particular importance. Research has shown that social support, typically in the form of guidance, assistance, and interaction from significant individuals in parents' lives, can effectively enhance their spiritual health. Social support may include assistance from children, spouses, friends, family members, or community members [66, 67]. Studies indicate that social support can help parents better manage their family and personal responsibilities by distributing their time and energy. Additionally, it enables them to face daily challenges at home and work constructively and positively shape their response to life's stressors. The impact of social support on parents' spiritual health can lead to improved family relationships, a sense of participation and commitment to religious activities, and facilitate the achievement of spiritual goals in life [68]. Parents' spiritual health plays a vital role in their overall well-being and their ability to navigate parenting challenges. This emotional and psychological well-being directly affects their capacity to cope with stress and maintain positive relationships. Social support can be received from family members, friends, or even formal support networks. The role of social support reinforces a sense of belonging, creates a protective barrier during stressful situations, and enhances personal well-being [69]. Regarding parents' spiritual health and social support, it can be said that having a supportive network of family and friends allows parents to share their values, beliefs, and experiences. These interactions strengthen their spiritual connections and foster a sense of validation and acceptance. Furthermore, social support enhances feelings of

connection and nurtures a supportive environment that enables parents to explore and deepen their spiritual journey [70, 71]. Social support acts as a safety net during challenging times by providing emotional guidance and comfort. When parents face difficulties such as raising a child with special needs or undergoing major life changes, having a strong support system helps them stay grounded, find peace in their spirituality, and regain balance [4, 69]. Social support effectively reduces parental stress by providing a means to share burdens and seek advice. By alleviating stress and anxiety, parents can focus more on enhancing their spiritual health, creating a positive domino effect that increases their overall ability to face challenges with resilience while maintaining a healthy mental state. Social support not only impacts parents' inner well-being but also affects their relationships with their children [72]. A strong support network can help parents connect with their children based on shared values and beliefs, thereby creating an appropriate nurturing environment. This harmonious relationship enables parents to guide their children's spiritual growth while imparting spiritual values to them [73]. Social support intervenes by emphasizing the importance of caring for parents' spiritual health as part of their overall well-being. Support networks encourage parents to engage in self-reflection as well as participate in spiritual practices that replenish their energy reserves [74, 75]. This self-care benefits not only the parents but also creates a positive space for the growth of their children. Consequently, social support has a profound impact on parents' spiritual health. By providing emotional guidance, reducing stress levels, strengthening relationships, and facilitating self-care, social support plays a crucial role in shaping parents' spiritual well-being. Understanding the importance of strengthening social support networks among parents can significantly enhance their ability to guide their children more effectively while establishing healthy spiritual foundations for themselves and their children [76].

4.2. Factors Influencing Parents' Desire to Have Children

4.2.1. Biological and Evolutionary Factors of Parents

Humans have an inherent and often intense desire to become parents, have children, and raise them to adulthood. This intrinsic motivation is shaped by a complex interplay of biological and evolutionary factors that have influenced human behavior for thousands of years. Understanding these factors is crucial for uncovering the secrets behind the deep-rooted desire for reproduction. Currently, the intricate relationship between biology, evolution, and parental desire to have children has been scientifically revealed; thus, exploring these aspects can provide valuable insights into the underlying drivers of one of the most fundamental aspects of human existence: the desire to become a parent [24, 77]. When it comes to the human desire to have children, many factors are involved. Beyond social and cultural influences, there are also biological and evolutionary forces that shape our

parenting instincts. Understanding these factors can clarify why we feel the desire to reproduce and care for our offspring [78].

4.2.1.1. Genetic Predisposition

4.2.1.1.1. Genetic Influences on Parents' Desire to Have Children

Research results indicate that genes play a significant role in shaping the desire for parenthood. Studies have also shown that specific genetic variations can influence our parenting instincts, making some individuals more predisposed to having children than others. These genetic predispositions can affect everything from levels of nurturing behavior to the willingness to commit long-term to raising children. Genetic factors impact parental desire by shaping our innate instincts and predispositions. Certain genes are believed to be associated with parenting behaviors and the desire to have children, although specific genes involved are still under investigation. Genetic variations may contribute to individual differences in parental desire, highlighting the importance of our biological makeup in shaping this essential aspect of human behavior [79, 80].

4.2.1.1.2. Candidate Genes and Parental Behavior

Researchers have identified specific genes associated with parenting behavior. For example, variations in the oxytocin receptor gene are linked to differences in parental desire for childbearing and caregiving. Studies also suggest that the dopamine receptor gene plays a role in the motivation to care for children [81, 82].

4.2.1.2. Desire for Self and Kin Development

4.2.1.2.1. Theoretical Framework of Reproductive Fitness in Parents' Desire to Have Children

From an evolutionary perspective, the desire to have children can be understood in terms of reproductive fitness. The ultimate goal of any organism is to pass on its genetic material to future generations. In this context, the desire for reproduction and child-rearing becomes a mechanism for increasing reproductive success and ensuring the survival of an individual's genes [83].

4.2.1.2.2. Evolutionary Importance of Parents' Desire to Have Children

The parental desire to have children has clear evolutionary advantages. Caring for offspring increases their chances of survival and ensures the continuity of genetic heritage. Additionally, investing in children's well-being can enhance their reproductive success in the future. Therefore, the evolutionary significance of parental desire lies in its ability to promote gene replication across generations [82, 84].

4.2.1.3. Hormonal Influences

4.2.1.3.1. The Role of Oxytocin in Parents' Desire to Have Children

Hormones play a significant role in shaping parental

motivation and bonding. Oxytocin, often referred to as the “love hormone,” is strongly associated with behavior and attachment. Research has shown that increased levels of oxytocin in both mothers and fathers facilitate bonding with their children. This hormone contributes to feelings of trust, sexual arousal, and emotional connection and promotes caregiving behaviors [85, 86].

4.2.1.3.2. The Role of Testosterone in Parents' Desire to Have Children

On the other hand, testosterone, which is often associated with assertiveness and competition, can influence parental motivation. Studies have indicated that men with lower levels of testosterone exhibit less sexual and emotional attachment to their children and also show a reduced desire for parenthood. This suggests that hormonal fluctuations can affect the level of parental motivation and shape individuals' investment in their offspring. By understanding the biological and evolutionary factors that drive parental desire, we can gain insights into our motivations and behaviors as parents [87, 88]. It is important to note that each individual's experience of parenthood is unique. Therefore, whether it be genetics, evolution, or hormones, it is clear that becoming a parent is a complex and multifaceted journey that can sometimes transcend scientific explanations.

4.2.1.4. Parental Genetic Investment

4.2.1.4.1. The Level of Parental Investment in Time, Energy, and Resources for Transmitting Their Genes to the Next Generation

The parental investment theory scientifically explains why parents invest so much in their children. Essentially, this theory suggests that parents naturally tend to invest their time, energy, and resources into their offspring because it increases their chances of survival and reproductive success. In simpler terms, having children and caring for them helps ensure that their genes are passed on to the next generation [79, 89]. Parental investment also comes with its fair share of challenges and costs. It can be said that childbearing is not without expense. From prenatal care to education and upbringing costs, these are just some of the expenses associated with parenting that affect family economics. However, despite financial pressures, parents still have this deep-seated desire to give birth to and raise children. This desire can be shaped by various factors, one of which is the concept of parental investment [79, 90].

4.2.1.5. Social Factors Influencing the Evolution of Parenting Behavior in Parents

4.2.1.5.1. Cultural Diversity in Parents' Desire for Childbearing

Different cultures have varying perspectives on family and parenting, which can significantly influence parents' desires. In some cultures, having children is considered an essential part of life and a symbol of success. In others, there may be a greater emphasis on career and personal satisfaction, leading to a lower desire for parenthood. Therefore, it can be said that cultural diversity can have a

direct or indirect role in parents' childbearing preferences [43, 91].

4.2.1.5.2. Social Norms and Expectations in Parents' Desire for Childbearing

Social norms and expectations can play an important role in parents' desire for childbearing. Some of these expectations may be imposed on parents by family, society, or culture, potentially affecting their financial status, age, or social standing. For example, in some cultures or communities, it is expected that couples will have children soon after marriage, and not having children may be associated with social stigma or pressure. In these cases, social norms and expectations can pressure parents to have children and delay marriage. However, at other times, these norms and expectations can act as goals for parents, encouraging them to consider childbearing as a milestone in their lives. In any case, these matters are usually influenced by culture and social conditions and may affect parents' decisions and desires [92, 93].

4.2.1.6. Evolution of Parenting Behaviors

4.2.1.6.1. Evolutionary History of Parenting in Parents

Biological factors play a significant role in parents' inclination toward childbearing. From a biological perspective, reproduction is the fundamental goal of living beings. In humans, the reproductive system is well-regulated to facilitate the reproduction process. Hormonal changes in both males and females indicate readiness for reproduction, and the release of gametes is a crucial event in this process, establishing an inherent motivation for genetic dissemination within humans. Evolutionary factors also strongly influence the desire to have children. Evolutionary psychology suggests that behaviors leading to reproductive success have been favored by natural selection, resulting in the continuation of genes. The parental investment theory posits that individuals are more likely to invest resources, time, and energy in offspring who carry their genetic material. Consequently, humans have a strong evolutionary inclination toward childbearing because it enhances their genes' survival and reproduction [44]. Additionally, evolutionary factors such as kin selection theory can influence the desire to have children. The kin selection suggests that individuals are more likely to care for and invest in their close relatives because they share a greater proportion of their genes. This theory emphasizes the importance of cooperative behaviors, including child-rearing, to enhance overall genetic success [94].

4.2.1.6.2. Adherence of Modern Human Parenting Behaviors

The adherence to parenting behaviors in modern humans has been significantly influenced by various factors. With advancements in technology, changes in gender roles, and social and economic transformations, modern parents face new challenges regarding childbearing. One such challenge is adapting to societal

expectations regarding child-rearing. Parents may feel pressured to adopt parenting behaviors that align with cultural and social values based on societal expectations. Moreover, with changing attitudes toward parenting roles and increased awareness about child development and growth, modern parents may prefer evidence-based approaches to parenting practices. On the one hand, this could lead to a more scientific perspective on childbearing that presents new challenges for parents. Additionally, with increasing social and economic pressures, parents may encounter various challenges related to childbearing, including balancing work and family life [46]. Ultimately, adherence to parenting behaviors in modern humans has been significantly influenced by culture, technology, economic and social developments, and new attitudes toward parenting. These issues may challenge parents in their decision-making regarding childbearing and child-rearing while playing an important role in the ongoing development and changes within society.

4.2.1.7. Cultural and Social Influences on Parents' Desire for Childbearing

4.2.1.7.1. Different Cultural Perceptions of Parenthood

Cultural values and beliefs surrounding parenthood vary across different societies and influence individuals' perspectives on childbearing. Cultures that emphasize family duties and the importance of lineage promote a positive attitude toward having children. These cultures often view family formation as a fundamental aspect of life, reinforcing the desire for reproduction among individuals. Culture profoundly impacts how individuals understand and approach the idea of becoming parents. Different cultures possess unique values and beliefs regarding parenting, which in turn shape individuals' attitudes. Traditional views often emphasize the importance of family and reproduction, while modern views may prioritize individual goals and career aspirations [47]. Cross-cultural comparisons provide insight into the diversity of parenting attitudes and highlight the impact of cultural factors. Gender stereotypes and social expectations significantly affect parents' attitudes toward childbearing. Traditional gender roles assign specific responsibilities to men and women in child-rearing. These expectations, along with social pressures, can influence how individuals perceive their competence as parents. However, with changing gender dynamics, these attitudes are also evolving, challenging traditional norms and paving the way for new perspectives on parenting.

4.2.1.7.2. The Role of Religion and Tradition

Religious practices and traditions significantly impact individuals' perceptions of childbearing. Religions that emphasize the importance of family, such as Christianity, Islam, or Hinduism, often encourage their followers to have children. Similarly, customs and traditional ceremonies can reinforce the idea of parenthood as a vital social role, shaping individuals' desire to have children.

The impact of religion on reproductive choices can vary greatly depending on individual beliefs and interpretations. While some religious teachings may encourage reproduction, others may impose specific guidelines or restrictions regarding family planning methods. Religion can play a complex role in shaping parents' attitudes toward childbearing choices and reproduction. Religious institutions often influence family values and attitudes toward childbearing by providing a framework for understanding parental roles within society. Religious teachings may affect individuals' decisions regarding family size, contraception, fertility treatments, and reproductive technologies. Additionally, religion can significantly influence parents' attitudes toward childbearing; various religious beliefs and practices may emphasize the importance of family and reproduction. Some religions may encourage larger families, while others may support responsible parenting and family planning [75, 95].

4.2.1.7.3. Social and Economic Influences

When it comes to deciding to have children, financial and economic issues are crucial. Financial considerations play a significant role in shaping parents' attitudes toward childbearing. From postpartum care costs to education and extracurricular activities for children, these factors can be overwhelming. Many parents carefully plan their family size based on their financial status and the resources they can provide for their children. Social and economic factors such as income, education, and job opportunities also influence individuals' desire for childbearing. Low-income families may perceive the costs associated with raising children as a barrier to parenthood, while higher-income families may view having children as a means to secure their socio-economic status by ensuring the continuity of wealth or social position. Income inequality also affects parents' attitudes toward childbearing; families with lower incomes may feel greater pressure to limit the number of children they have due to financial constraints [48]. In contrast, higher-income families may have more flexibility in making decisions about childbearing and may be able to provide more opportunities for their children. Balancing work-life demands and career aspirations also plays a role in parents' attitudes toward having children. Many individuals, especially women, struggle to balance their careers with their desire to start a family. The demands of the modern workplace and pressure for professional success can shape decision-making regarding childbearing; some individuals may choose to delay having children or opt against it altogether [96].

4.2.1.7.4. Social Support and Community Norms

The level of social support available in a community plays a crucial role in shaping parental attitudes. Communities with strong family support systems can create a nurturing environment that enhances the desire to have children. Additionally, cultural norms and social expectations surrounding childbearing can influence individuals' decision-making, as societal pressure may encourage or discourage parents [97].

4.2.1.7.5. Historical and Political Factors

Historical events and political conditions can impact societal attitudes toward childbearing. For example, countries recovering from wars or facing declining population growth may implement policies or campaigns to promote larger families. Conversely, communities experiencing rapid urbanization and industrialization may witness declining birth rates due to changing lifestyles and priorities [98, 99].

4.2.1.7.6. Gender Roles and Parenting Responsibilities

Common gender roles and expectations within a society can shape men's and women's attitudes toward childbearing. Societies with traditional gender roles often place the primary responsibility for childbearing on women, potentially influencing their decisions about having children. In contrast, societies that prioritize gender equality may see a shift toward shared parenting responsibilities, thereby potentially affecting individuals' desire for childbearing [99].

4.2.1.7.7. Access to Family Planning and Reproductive Health Services

The availability and accessibility of family planning and reproductive health services significantly influence individuals' decisions regarding childbearing. Communities with established healthcare systems and comprehensive family planning options may provide individuals with the necessary tools to plan their families, shaping their desire to have children at specific times or limiting the number of children [100, 101].

4.2.1.7.8. Media and Cultural Influences

Contemporary media plays an important role in shaping social norms and values surrounding parenting. Portrayals of ideal family life, parenting techniques, and the cultural significance of children can influence individuals' attitudes toward childbearing. Furthermore, media representations of alternative family structures and lifestyles may challenge traditional perceptions and impact the desire to have children. Television shows, films, and advertisements often depict idealized or exaggerated versions of parenthood that may not reflect reality [49]. These images can affect how individuals perceive the joys and challenges of having children. In the age of social media and celebrity culture, the influence on parental attitudes is greater than ever. Celebrities and ordinary people share their lives on platforms like social media, creating a cohesive image of parenting. This can lead to unrealistic expectations and pressure individuals to conform to specific parenting ideals. Consumerism also plays a role in shaping parenting ideals; advertisements for children's products and parenting magazines often promote a particular image of what it means to be a good parent, emphasizing the need for specific products or parenting practices. This can lead to feelings of inadequacy or pressure to meet social standards [99, 102].

4.2.1.8. Psychological and Emotional Issues Affecting Parents' Desire for Childbearing

4.2.1.8.1. Biological Imperatives of Parenthood

Biological instincts, such as the desire to pass on genes, play a fundamental role in shaping parents' desire to have children. Evolutionary psychology suggests that reproduction is an intrinsic human motivation driven by the survival of an individual's genetic lineage. These inherent motivations, along with the biological urge to create and nurture, significantly contribute to parents' desires [103, 104].

4.2.1.8.2. Emotional Fulfillment

Emotional fulfillment involves recovering latent concepts and feelings in human minds and hearts, leading to a close and strong bond with children. This emotional fulfillment has a significant impact on parents' childbearing behaviors. Parents who experience adequate emotional fulfillment with their children create optimal conditions for their children's psychological and social development. They are able to instill feelings of security, self-confidence, and healthy relationships with others in their children. Moreover, parents' emotional fulfillment can help them respond more harmoniously to their children's behaviors [105].

A close bond improves parent-child relationships, allowing parents to better understand their children's needs and emotions. Consequently, parents who feel emotionally fulfilled may be more concerned about effective ways to raise their children, thus better accommodating their children's individual differences and unique needs. Overall, parental emotional fulfillment can serve as significant guidance in shaping childbearing behaviors. This important element can help foster respectful and caring relationships with children while providing an optimal environment for healthy growth [105, 106].

4.2.1.9. Social Expectations and Cultural Norms

Cultural values and social expectations shape individuals' inclinations toward parenthood. Many cultures perceive parenthood as a fundamental milestone in life that fosters a sense of belonging and validation within communities. Social pressures, including familial expectations and peer influences, can affect parents' decision-making processes as they embark on their journey toward family formation [99].

4.2.1.10. Personal Identity and Legacy

For some individuals, the desire to become parents stems from a wish to leave a lasting legacy and contribute to future generations. Parenthood allows individuals to establish a sense of identity within a larger familial context while creating a distinct place within their ancestral lineage. This need for immortality can ignite their passion for bringing children into the world [75, 107].

4.2.1.11. Emotional Readiness and Life Fulfillment

Future parents often contemplate whether they possess the emotional readiness and stability necessary for raising a child. They assess their personal growth and achievements while seeking the success and fulfillment that parenthood promises. Emotional stability, financial security, and a sense of purpose contribute to their preparedness for the challenges of parenting [75].

4.2.1.12. Emotional Attachments and Intergenerational Bonds

Parents' desires are deeply connected to forming emotional attachments and intergenerational bonds. The opportunity to witness children's growth and development as part of their milestones significantly influences decisions regarding having children. The bond established between parents and children fosters a profound sense of emotional connection that supports lifelong companionship [75, 99].

4.2.1.13. Embracing Parenthood as a Source of Personal Growth

Parenthood is often viewed as a means for personal growth and self-improvement. The challenges and responsibilities associated with raising children provide opportunities for parents to develop empathy, patience, and compassion. The desire to embark on this transformative journey motivates individuals to become parents while welcoming the chance for emotional and psychological evolution [99].

4.2.1.14. Fear of Regret and Missed Opportunities

Fear of regret later in life is an important emotional factor influencing parental decisions. Concerns about missing out on the joys and rewards of parenthood may lead individuals to choose parenthood over the potential regret of not having children. The fear of loneliness in old age, coupled with the desire for a support system, are emotional considerations that contribute to their willingness to have children [95, 108].

4.2.1.15. Parenting Models and Childhood Experiences

Parents' own experiences, along with parental models they encountered during upbringing, also affect their inclination toward childbearing. Positive childhood experiences, along with positive role models, encourage individuals to start families of their own. Conversely, negative childhood experiences may foster a desire to provide a better environment for their own children, breaking negative cycles of parenting [99, 109].

5. STUDY LIMITATIONS

The included studies exhibit significant heterogeneity in terms of methodology, sample characteristics, and measurement tools. This variability can make it difficult to draw consistent conclusions. Additionally, many studies may focus on specific cultural or religious contexts, such as Islamic societies, which limits the generalizability of the

findings to other populations. The reliance on self-reported data for spiritual health and childbearing desires is another limitation, as it can introduce biases such as social desirability or recall bias, affecting the accuracy of the results. Another key limitation is the predominance of cross-sectional study designs, which restrict the ability to establish causal relationships between spiritual health and the desire for childbearing. Longitudinal studies are needed to better understand how these factors interact over time. Furthermore, the lack of standardized measures for assessing spiritual health across studies may lead to inconsistencies in how this construct is defined and evaluated, impacting the comparability and reliability of the findings. The review may also disproportionately include studies focused on specific demographic groups, such as married couples or women of reproductive age, potentially overlooking the perspectives of other populations, such as older adults. Publication bias is another concern, as studies with significant or positive findings are more likely to be published than those with null or negative results. This could skew the overall conclusions of the review. Additionally, the review may not fully explore mediating or moderating factors, such as socioeconomic status, education, or access to healthcare, which could influence the relationship between spiritual health and childbearing desires. The exclusion of gray literature, such as unpublished studies or conference papers, may also limit the depth and breadth of the review. Language and geographic restrictions could further narrow the scope, as the review may primarily include studies published in specific languages or from certain regions.

Temporal changes in societal attitudes toward spirituality and childbearing may not be adequately accounted for, as shifts in religious adherence, gender roles, or economic conditions over time could influence the relationship between these variables. Biological or evolutionary factors, such as hormonal influences or genetic predispositions, may not be sufficiently addressed, limiting the understanding of how these factors interact with spiritual health. Ethical and sensitivity concerns may arise, as some studies involve sensitive topics like infertility or religious trauma, which could affect participants' willingness to provide honest responses. Data availability may also be a limitation, as access to full-text articles or raw data from some studies could be restricted, hindering the depth of analysis.

CONCLUSION

The findings underscore the profound interplay between parents' spiritual health and their desire for childbearing, highlighting the multifaceted nature of this relationship. Spiritual health, shaped by beliefs, values, religious practices, and social support, emerges as a critical factor influencing reproductive decisions. At the same time, biological, cultural, and psychological dimensions further shape parents' willingness to have children, creating a complex web of influences that policymakers must consider. To address these dynamics, health policymakers should adopt a holistic approach that integrates spiritual, emotional,

and social well-being into reproductive health strategies. Programs aimed at enhancing spiritual health-such as community-based initiatives, religious counseling, and family support networks-can play a pivotal role in encouraging childbearing by fostering a sense of purpose, emotional readiness, and social connectedness among parents. Additionally, policies should focus on creating environments that support families throughout the childbearing process, addressing both material and emotional needs. Furthermore, understanding the cultural and psychological factors that influence childbearing decisions is essential for designing inclusive and effective policies. Policymakers should consider the diverse cultural and religious contexts in which families operate, ensuring that programs are tailored to meet the unique needs of different communities. By promoting spiritual health and addressing the broader social, emotional, and biological factors that shape reproductive decisions, policymakers can create supportive frameworks that empower parents to make informed and meaningful choices about childbearing. This, in turn, can contribute to healthier family structures and the well-being of future generations.

FUTURE RESEARCH DIRECTIONS

First, longitudinal studies could be conducted to examine how changes in parents' spiritual health over time influence their desire for childbearing, providing a deeper understanding of causal relationships. Additionally, cross-cultural comparisons would help identify how cultural and religious diversity impacts the connection between spiritual health and childbearing, offering a broader perspective on this relationship. Another important direction is to investigate the role of gender in shaping the link between spiritual health and childbearing. For example, how do mothers and fathers differ in their perceptions of spirituality and its influence on their decision to have children? Similarly, the impact of social support systems, such as religious communities and extended family networks, should be explored to understand how these systems enhance spiritual health and, in turn, influence childbearing decisions. Qualitative studies could shed light on the mechanisms through which social support operates in this context.

Psychological and emotional factors also warrant further exploration. Research could focus on how emotional readiness, life satisfaction, and personal growth mediate the relationship between spiritual health and the desire for childbearing. This would clarify how spiritual health translates into emotional preparedness for parenting. Furthermore, the interplay between biological factors-such as hormonal influences and genetic predispositions-and spiritual health should be examined to understand how these elements interact to shape reproductive decisions. Policy and program evaluation is another critical area for future research. Assessing the effectiveness of initiatives aimed at enhancing spiritual health and supporting families in their childbearing decisions could provide valuable insights. For instance, community-based programs, religious counseling, and family support services could be evaluated to determine their impact on childbearing motivations. Additionally,

interventions designed to improve spiritual health among parents and couples could be developed and tested to see if they increase the desire for childbearing. These interventions might include spiritual counseling, mindfulness practices, or community-building activities. Intergenerational transmission of spiritual health is another promising area of study. Research could explore how spiritual health is passed down through generations and how it influences childbearing decisions in subsequent generations. This would provide insights into the long-term effects of spiritual health on family dynamics and reproductive behavior. Moreover, the impact of modern influences, such as technology, social media, and secularization, on the relationship between spiritual health and childbearing should be investigated. Understanding how digital communities shape spiritual beliefs and family planning decisions could offer new perspectives on this topic.

AUTHORS' CONTRIBUTIONS

The authors confirm their contributions to the paper as follows: study conception and design were developed by RR, AKH, KH, and SST; data collection was performed by SB; analysis and interpretation of results were conducted by SD and HSHG; and the manuscript was drafted by SHS, RR, and KH. All authors reviewed the results and approved the final version of the manuscript.

ABBREVIATION

PRISMA = Preferred Reporting Items for Systematic Reviews and Meta-Analyses

ETHICAL STATEMENT

The study was approved by the ethics committee of Mashhad University of Medical Sciences, Iran (IR.MUMS.REC.1403.119).

CONSENT FOR PUBLICATION

Not applicable.

STANDARDS OF REPORTING

PRISMA guidelines and methodology were followed.

AVAILABILITY OF DATA AND MATERIALS

The data sets used and/or analysed during this study are available from the corresponding author [K.H] upon request.

FUNDING

This research was financially supported by the Mashhad University of Medical Sciences Iran, Funder ID: 4022031.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

ACKNOWLEDGEMENTS

The authors are pleased to thank the deputy for the research and technology of the Mashhad University of

Medical Sciences Ethics Committee, which helped us to conduct the study.

SUPPLEMENTARY MATERIAL

PRISMA checklist is available as supplementary material on the publisher's website along with the published article.

REFERENCES

- [1] Zohar D. Spiritual intelligence: The ultimate intelligence. Bloomsbury publishing 2012.
- [2] Koenig HG. Spirituality in patient care: Why, how, when, and what. Templeton Foundation Press 2013.
- [3] mohammadyari G. Relationship between parent's spiritual intelligence, level of education and children's mental health. *Procedia Soc Behav Sci* 2012; 69: 2114-8. <http://dx.doi.org/10.1016/j.sbspro.2012.12.174>
- [4] Jaberi A, Momennasab M, Yektatalab S, Ebadi A, Cheraghi MA. Spiritual health: A concept analysis. *J Relig Health* 2019; 58(5): 1537-60. <http://dx.doi.org/10.1007/s10943-017-0379-z> PMID: 28283931
- [5] Albaugh JA, Ed. Spirituality and life-threatening illness: A phenomenologic study. *Oncol Nurs Forum* 2003; 30(4): 593-8. <http://dx.doi.org/10.1188/03.ONF.593-598> PMID: 12861320
- [6] Anandarajah G, Hight E. Spirituality and medical practice: Using the HOPE questions as a practical tool for spiritual assessment. *Am Fam Physician* 2001; 63(1): 81-9. PMID: 11195773
- [7] Bailey ME, Moran S, Graham MM. Creating a spiritual tapestry: Nurses' experiences of delivering spiritual care to patients in an Irish hospice. *Int J Palliat Nurs* 2009; 15(1): 42-8. <http://dx.doi.org/10.12968/ijpn.2009.15.1.37952> PMID: 19234430
- [8] Banks-Wallace J, Parks L. It's all sacred: African American women's perspectives on spirituality. *Issues Ment Health Nurs* 2004; 25(1): 25-45. <http://dx.doi.org/10.1080/01612840490249028-22> PMID: 14660315
- [9] Barker SL, Floersch JE. Practitioners' understandings of spirituality: Implications for social work education. *J Soc Work Educ* 2010; 46(3): 357-70. <http://dx.doi.org/10.5175/JSW.2010.200900033>
- [10] Boswell GH, Kahana E, Dilworth-Anderson P. Spirituality and healthy lifestyle behaviors: Stress counter-balancing effects on the well-being of older adults. *J Relig Health* 2006; 45(4): 587-602. <http://dx.doi.org/10.1007/s10943-006-9060-7>
- [11] Momennasab M, Moattari M, Abbaszade A, Shamshiri B. Spirituality in survivors of myocardial infarction. *Iran J Nurs Midwifery Res* 2012; 17(5): 343-51. PMID: 23853646
- [12] Zadeahmad Z, Abdolahi M, Tavakkoli Sani SB, Khorasani E. Charoghchian. The study of tendency to childbearing and its relationship with spiritual health and health literacy in women referred to the healthcare centers of Torbat Heydarieh, Iran, in 2019. *Razi Journal of Medical Sciences* 2020; 27(8): 32-41.
- [13] Charoghchian Khorasani E, Tavakoly Sany SB, Abdollahi M, Najafi M, Zadehahmad Z. Maternal health literacy and its association with spiritual health in women. *J Health Lit* 2022; 7(1): 67-74.
- [14] Amirian A, Jandaghian Bidgoli M, Khorvash F, Abdi F, Shaterian N, Jafarimehr M. Investigating the association of religious beliefs with reproductive behaviors in reproductive aged women: A systematic review. *J Isfahan Med Sch* 2023; e139352.
- [15] Karimi Z, Qorbani Z, Zare N, Nobakhti SS, Gholizadeh S. The role of spiritual vitality in marital satisfaction and attitude towards childbearing in couples. *J Islamic Lifestyle Health* 2023; 7(3): 177-85.
- [16] Puchalski CM, Vitillo R, Hull SK, Reller N. Improving the spiritual dimension of whole person care: Reaching national and international consensus. *J Palliat Med* 2014; 17(6): 642-56. <http://dx.doi.org/10.1089/jpm.2014.9427> PMID: 24842136
- [17] Torabi F, Sheidani R. A study of effective factors in tendency to fewer childbearing of 15-49 year old women residents of Tehran. *J Woman Fam Stud* 2019; 7(2): 31-67.
- [18] Rahnama A, Roozbeh N, Salimi Asl A, Kazemi Gerashi Z, Abbaszadeh M, Dabiri F. Factors related to childbearing in Iran: A systematic review. *J Prev Med* 2022; 9(1): 6-17.
- [19] Ghazanfarpour M, Arghavani E, Khadivzadeh T, Saeidi M, Kareshki H, Irani M, et al. Childbearing motivation in Iranian engaged couples: A structural equation model. *Int J Pediatr* 2018; 6(4): 7563-8.
- [20] Virtala A, Kunttu K, Huttunen T, Virjo I. Childbearing and the desire to have children among university students in Finland. *Acta Obstet Gynecol Scand* 2006; 85(3): 312-6. <http://dx.doi.org/10.1080/00016340600555975> PMID: 16553179
- [21] Zhang WZ, Zheng JY. The willingness of women of childbearing age to have a second child in lanzhou under the "universal two-child policy". *Child Youth Serv Rev* 2021; 121: 105732. <http://dx.doi.org/10.1016/j.childyouth.2020.105732>
- [22] Tavousi M, Motlagh ME, Eslami M, Haerimehrizi A, Hashemi A, Montazeri A. Fertility desire among Iranians living in Tehran: Reasons for desire and disinterest. *Payesh* 2016; 15(6): 663-8. [Health Monitor].
- [23] Töyry S, Kalimo R, Äärimala M, Juntunen J, Seuri M, Räsänen K. Children and work-related stress among physicians. *Stress Health* 2004; 20(4): 213-21. <http://dx.doi.org/10.1002/smi.1009>
- [24] Liu C, Rahman MNA, Mao Y, Wang X, Yu X. Fertility desire of chinese parents to have more children under the three-child policy. *J Popul Soc Stud* 2023; 31: 455-81.
- [25] SHAHABADI Z. The investigation of attitude toward studying continuation after marriage and its effect on parenting decision (the studying of women who are about to marriage in Nayshabour town). *Soc Sci* 2016; 22(71): 126-62.
- [26] Foroutan Y, Mirzaei S. Ethnic preferences for childbearing in Iran. *Population Studies* 2018; 4(2): 35-60.
- [27] Bandehelahi K, Khoshravesh S, Barati M, Tapak L. Psychological and sociodemographic predictors of fertility intention among childbearing-aged women in Hamadan, West of Iran: An application of the BASNEF model. *Korean J Fam Med* 2019; 40(3): 182-7. <http://dx.doi.org/10.4082/kjfm.18.0008> PMID: 30636384
- [28] Yang J. Gendered division of domestic work and willingness to have more children in China. *Demogr Res* 2017; 37: 1949-74. <http://dx.doi.org/10.4054/DemRes.2017.37.62>
- [29] Darvish L, Ghorbani M, Teshnizi SH, et al. Evaluation of thyroid gland as an organ at risk after breast cancer radiotherapy: A systematic review and meta-analysis. *Clin Transl Oncol* 2018; 20(11): 1430-8. <http://dx.doi.org/10.1007/s12094-018-1875-7> PMID: 29761266
- [30] Khani S, Mohammadzade H, Abbasi-Shavazi MJ. The intergenerational comparison of marriage and childbearing ideals with emphasis on background characteristics in Sanandaj district. *J Soc Prob Iran* 2019; 9(2): 49-76.
- [31] Afarini FS, Akbari N, Montazeri A. The relationship between social support and the intention of childbearing in women of reproductive age. *Payesh* 2018; 17(3): 315-28. [Health Monitor].
- [32] Moshfegh M, Moradisani Q, Hoseinkhani S. An analysis of the relationship between employment and desire to have children among working women who are at the age of marriage in the country. *Population* 2017; 23(95): 1-24.
- [33] Samani L, Kouhpeima Ronizi Z, Kouhpeima Ronizi S. The Influence of legal supports of working women during pregnancy and lactation period on their desire to have children. *Islam J Women Fam* 2020; 8(19): 117-32.
- [34] Shakib MHM, Zarifnejad G, Mazloom SR, Khadivzadeh T. The relationship between spiritual health and fertility preferences among students of selected higher education centers, Mashhad, Iran. *J Midwifery Reprod Health* 2021; 9(2)

- [35] Allen H-C, Adams C, Jenkins K, Meek JW. How parents nurture the spiritual development of their children. In: Kevin E, Ed. *Understanding Children's Spirituality: Theology, Research, and Practices*. (1st ed.). Lawson 2012; pp. 197-222.
- [36] Büssing A, Riklikienė O. Spiritual needs of parents with health-affected children. *Spiritual Needs in Research and Practice: The Spiritual Needs Questionnaire as a Global Resource for Health and Social Care*. Springer 2021; pp. 351-67.
http://dx.doi.org/10.1007/978-3-030-70139-0_25
- [37] Gholampour Nagharchi F. Effect of parents' spiritual health on children's mental health. *Islam And Health Journal* 2021; 6(2): 108-16.
- [38] Gnath C, Mallmann P. Natural fertility and desire to have children. *Gynakol Endokrinol* 2016; 14(2): 70-7.
<http://dx.doi.org/10.1007/s10304-016-0061-7>
- [39] Moodley T. The relationship between coping and spiritual well-being during adolescence. University of the Free State 2008.
- [40] Safara M, Moosavi S, Gholamnejad H. Outcomes of spiritual health in children: A qualitative content analysis. *J Educ Community Health* 2023; 10(2): 109-14.
<http://dx.doi.org/10.34172/jech.2023.2032>
- [41] Virtala A, Vilska S, Huttunen T, Kunttu K. Childbearing, the desire to have children, and awareness about the impact of age on female fertility among Finnish university students. *Eur J Contracept Reprod Health Care* 2011; 16(2): 108-15.
<http://dx.doi.org/10.3109/13625187.2011.553295> PMID: 21281094
- [42] Rossin B. Desire for children later in life. *Sexologies* 2019; 28(1): e1-6.
<http://dx.doi.org/10.1016/j.sexol.2018.07.003>
- [43] Callister LC, Semenik S, Foster JC. Cultural and spiritual meanings of childbirth. *Orthodox Jewish and Mormon women. J Holist Nurs* 1999; 17(3): 280-95.
<http://dx.doi.org/10.1177/089801019901700305> PMID: 10690070
- [44] Meghdadi M, Javadpour M. The parents role in promoting the spiritual health of children in Islam. *Med Hist* 2017; 8(29): 83-117.
- [45] Goli M. Parents' role on fostering of children and their spiritual health from Islamic view. *J Mediev Hist* 2016; 7(25): 101-28.
- [46] Heravi M, Cheraghi Koutiani E, Herati M. Analysis of single child injuries for parents with a religious and psychological approach. *Bi-Quart J Isl Stud Soc Injuries* 2020; 2(1): 163-82.
- [47] Keshavarz H, Haghighatian M, Tavasoli Dinani K. A study on the factors influencing the space between marriage and having children (case study: Married women of 20-49 in Isfahan). *J Appl Sociol* 2013; 24(2): 111-25.
- [48] Piltan F, Rahmani M. Investigating factors affecting the tendency toward childbearing among married men and women (Case of study: Men and women aged 25 to 45 years Old in Jahrom). *J Iranian Soc Dev Stud* 2015; 7(2 (26)): 121-34. Available from: <https://sid.ir/paper/231884/en>
- [49] Ghasemi Ardahaii A, Manafiazar R, Mahmoudiani S. Social factors influencing the number of children of married women of Ahari Township. *Women's Strategic Studies* 2018; 21(81): 143-66.
- [50] Hajizadeh F, Ozgoli G, Gharenaz MS, Sheikhan Z, Nasiri M, Jannesari S. Examining religious attitudes and reproductive behavior among women visiting health centers of Shahid Beheshti University of Medical Sciences. *J Pizhūhish Dīn Salāmat* 2017; 3(3): 68-79.
- [51] Khadivzadeh T, Irani M. Religious beliefs and fertility behavior among women of reproductive age in Mashhad, Iran 2016. *J Mazandaran Univ Med Sci* 2018; 28(167): 133-44.
- [52] Savabi H. Investigation of trends to fertility and the related social factors (A case study of married women 15 to 50 years in Tabriz). *Sociol Stud* 2013; 17(5): 23-42.
- [53] Zhang L. Religious affiliation, religiosity, and male and female fertility. *Demogr Res* 2008; 18: 233-62.
<http://dx.doi.org/10.4054/DemRes.2008.18.8>
- [54] Hayford SR, Morgan SP. Religiosity and fertility in the United States: The role of fertility intentions. *Soc Forces* 2008; 86(3): 1163-88.
<http://dx.doi.org/10.1353/sof.0.0000> PMID: 19672317
- [55] Latifnejad Roudsari R, Jafari H, Taghipour A, Khadem N, Ebrahimzadeh S. The association of religious beliefs in infertile couples' attitude towards donation procedures and its selection as a therapeutic approach to infertility. *Majallah-i Zanan, Mamai va Nazai-i Iran* 2013; 16(44): 1-10.
- [56] Kaveh Firouz Z, Abbasi-Shavazi MJ, Serajzadeh SH, Ramazi N. The relationship between religiosity and family values with fertility desires and intention among married women in Tehran. *Q Soc Stud Res Iran* 2021; 10(2): 587-623.
- [57] Muinifar M. Reproductive right in Islamic Law. *J Contemp Isl Stud* 2022; 4(2): 221-33.
- [58] Abbasi M, Azizi F. Conceptual definition and operationalization of spiritual health: A methodological study *Med Ethics* 2012; 6(20): 11-44.
- [59] Zohar D. *Spiritual intelligence-the ultimate intelligence*. London: Bloomsbury 2000.
- [60] Malmir M, Ebrahimi M, Sadeghi R. Religious affiliation and childbearing preferences of Iranian women. *J Relig Health* 2023; 62(2): 748-63.
<http://dx.doi.org/10.1007/s10943-022-01725-z> PMID: 36609952
- [61] Jalali B. *Ethnicity and family therapy*. New York: The Guilford Press. 2005; pp. 347-63.
- [62] Mangeli M, Rayyani M, Cheraghi MA, Tirgari B. Factors that encourage early marriage and motherhood from the perspective of Iranian adolescent mothers: A qualitative study. *World Fam Med J/Middle East J Fam Med* 2017; 15(8): 67-74.
<http://dx.doi.org/10.5742/MEWFM.2017.93058>
- [63] Keshavarz M, Shariati M, Ebadi A, Behboodi Moghadam Z. Desire and attitude to marriage among unmarried Iranian youth: A qualitative study. *Int J Women's Health Reprod Sci* 2018; 6(4): 425-31.
<http://dx.doi.org/10.15296/ijwhr.2018.71>
- [64] Daneshpour M, Asodeh MH, Khalili S, Lavasani MG, Dadras I. Self described happy couples and factors of successful marriage in Iran. *J Syst Ther* 2011; 30(2): 43-64.
<http://dx.doi.org/10.1521/jsyt.2011.30.2.43>
- [65] Khosravi Z, Cheraghmollaei L, Soleimani M. Parenting values, good parents based on children's perspective and ideal children based on parent's perspective: A qualitative study. *J Woman Fam Stud* 2023; 11(2): 158-90.
- [66] Ghasemi J, Safizadeh M, Khajeh Z, Nakhaee N. Immediate antecedents of intentions for having children in Southeast Iranian women. *Korean J Fam Med* 2023; 44(5): 289-94.
<http://dx.doi.org/10.4082/kjfm.23.0048> PMID: 37599004
- [67] Ahmadi K, Hossein-abadi FH. Religiosity, marital satisfaction and child rearing. *Pastoral Psychol* 2009; 57(5-6): 211-21.
<http://dx.doi.org/10.1007/s11089-008-0176-4>
- [68] Abdoljabbari M, Sheikhzakyayee N, Atashzadeh- Shoorideh F. Taking refuge in spirituality, a main strategy of parents of children with cancer: A qualitative study. *Asian Pacific journal of cancer prevention. APJCP* 2018; 19(9): 2575-80. PMID: 30256063
- [69] Narimani M, Rostami M. Role of Religious attitudes, Spiritual Well-Being and social support in predicting the life satisfaction in mothers of mental retardation children. *Islam Health J* 2014; 1(3): 41-9.
- [70] Sadeghi N, Hasanpour M, Heidarzadeh M, Alamolhoda A, Waldman E. Spiritual needs of families with bereavement and loss of an infant in the neonatal intensive care unit: A qualitative study. *J Pain Symptom Manage* 2016; 52(1): 35-42.
<http://dx.doi.org/10.1016/j.jpainsymman.2015.12.344> PMID: 27233143
- [71] Mosavi SA, Babazadeh R, Najmabadi KM, Shariati M. Assessing Iranian adolescent girls' needs for sexual and reproductive health information. *J Adolesc Health* 2014; 55(1): 107-13.
<http://dx.doi.org/10.1016/j.jadohealth.2013.11.029> PMID: 24560307
- [72] Ajoudani F, Jafarizadeh H, Kazamzadeh J. Social support and

- posttraumatic growth in Iranian burn survivors: The mediating role of spirituality. *Burns* 2019; 45(3): 732-40.
<http://dx.doi.org/10.1016/j.burns.2018.10.013> PMID: 30655059
- [73] Nikmanesh Z, Honakzahi F. Examining perceived social support, positive affection, and spirituality, as resilience factors, among boys of drug-dependent fathers. *Shiraz E Med J* 2016; 17(12)
<http://dx.doi.org/10.17795/semj42200>
- [74] Tork Zahrani S, Haji Rafiei E, Hajian S, Alavi Majd H, Izadi A. The correlation between spiritual health and maternal-fetal attachment behaviors in pregnant women referring to the health centers in Qazvin, Iran. *Int J Community Based Nurs Midwifery* 2020; 8(1): 84-91.
PMID: 32039282
- [75] Abbasi-Shavazi MJ, McDonald P. Family change in Iran: Religion, revolution, and the state International family change. Routledge 2007; pp. 191-212.
- [76] Ghaffari M, Fatehizade M, Ahmadi A, Ghasemi V, Baghban I. Predictors of family strength: The integrated spiritual-religious/resilient perspective for understanding the healthy/strong family. *Iran J Psychiatry Behav Sci* 2013; 7(2): 57-67.
PMID: 24644511
- [77] RezaeanLangeroodi R, Aziznazhad M, Hashemi M. The investigation of biological and psychological of marriage criteria from the view points of Iranian University students with that of their parents. *Procedia Soc Behav Sci* 2011; 28: 406-10.
<http://dx.doi.org/10.1016/j.sbspro.2011.11.077>
- [78] Morgan SP, King RB. Why have children in the 21st century? Biological predisposition, social coercion, rational choice. *Eur J Popul* 2001; 17: 3-20.
- [79] Kaplan HS, Lancaster JB. An evolutionary and ecological analysis of human fertility, mating patterns, and parental investment. *Offspring: Human fertility behavior in biodemographic perspective*. Washington (DC): National Academies Press 2003; 1: pp. : 170-223.
- [80] Segers S, Pennings G, Mertes H. Getting what you desire: The normative significance of genetic relatedness in parent-child relationships. *Med Health Care Philos* 2019; 22(3): 487-95.
<http://dx.doi.org/10.1007/s11019-019-09889-4> PMID: 30758798
- [81] Bos H, van Balen F. Children of the new reproductive technologies: Social and genetic parenthood. *Patient Educ Couns* 2010; 81(3): 429-35.
<http://dx.doi.org/10.1016/j.pec.2010.09.012> PMID: 20950985
- [82] Kelly SE. Choosing not to choose: Reproductive responses of parents of children with genetic conditions or impairments. *Sociol Health Illn* 2009; 31(1): 81-97.
<http://dx.doi.org/10.1111/j.1467-9566.2008.01110.x> PMID: 19144088
- [83] Gee M, Piercy H, Machaczek K. Family planning decisions for parents of children with a rare genetic condition: A scoping review. *Sex Reprod Healthc* 2017; 14: 1-6.
<http://dx.doi.org/10.1016/j.srhc.2017.08.001> PMID: 29195628
- [84] Davis DS. Genetic dilemmas: Reproductive technology, parental choices, and children's futures. Oxford University Press 2010.
- [85] Olazábal DE. Role of oxytocin in parental behaviour. *J Neuroendocrinol* 2018; 30(7): e12594.
<http://dx.doi.org/10.1111/jne.12594> PMID: 29603440
- [86] Szymanska M, Schneider M, Chateau-Smith C, Nezelof S, Vulliez-Coady L. Psychophysiological effects of oxytocin on parent-child interactions: A literature review on oxytocin and parent-child interactions. *Psychiatry Clin Neurosci* 2017; 71(10): 690-705.
<http://dx.doi.org/10.1111/pcn.12544> PMID: 28573830
- [87] Gordon I, Pratt M, Bergunde K, Zagoory-Sharon O, Feldman R. Testosterone, oxytocin, and the development of human parental care. *Horm Behav* 2017; 93: 184-92.
<http://dx.doi.org/10.1016/j.yhbeh.2017.05.016> PMID: 28576647
- [88] Hines M, Golombok S, Rust J, Johnston KJ, Golding J, Parents and Children Study Team ALS. Testosterone during pregnancy and gender role behavior of preschool children: A longitudinal, population study. *Child Dev* 2002; 73(6): 1678-87.
<http://dx.doi.org/10.1111/1467-8624.00498> PMID: 12487486
- [89] Kaplan H. A theory of fertility and parental investment in traditional and modern human societies. *Am J Phys Anthropol* 1996; 101(S23): 91-135.
[http://dx.doi.org/10.1002/\(SICI\)1096-8644\(1996\)23+<91::AID-AJP A4>3.0.CO;2-C](http://dx.doi.org/10.1002/(SICI)1096-8644(1996)23+<91::AID-AJP A4>3.0.CO;2-C)
- [90] Kalil A, DeLeire T. Family investments in children's potential: Resources and parenting behaviors that promote success. Psychology Press 2004.
<http://dx.doi.org/10.4324/9781410610874>
- [91] Erchull MJ, Liss M, Axelson SJ, Staebell SE, Askari SF. Well... she wants it more: Perceptions of social norms about desires for marriage and children and anticipated chore participation. *Psychol Women Q* 2010; 34(2): 253-60.
<http://dx.doi.org/10.1111/j.1471-6402.2010.01566.x>
- [92] Taylor CA, Hamvas L, Rice J, Newman DL, DeJong W. Perceived social norms, expectations, and attitudes toward corporal punishment among an urban community sample of parents. *J Urban Health* 2011; 88(2): 254-69.
<http://dx.doi.org/10.1007/s11524-011-9548-7> PMID: 21336503
- [93] Holton S, Fisher J, Rowe H. To have or not to have? Australian women's childbearing desires, expectations and outcomes. *J Popul Res* 2011; 28(4): 353-79.
<http://dx.doi.org/10.1007/s12546-011-9072-3>
- [94] Scales PC. Other People's Kids: Social Expectations and American Adults? Involvement with Children and Adolescents. Springer Science & Business Media 2012.
- [95] Moeini B, Taheri M, Shirahmadi S, Otogara M. Declining desire for childbearing in couples with higher education: A qualitative study in Iran. *J Popul Soc Stud* 2021; 29: 604-21.
<http://dx.doi.org/10.25133/JPSv292021.037>
- [96] Sonfield A, Hasstedt K, Kavanaugh ML, Anderson R. The social and economic benefits of women's ability to determine whether and when to have children. New York: Guttmacher Institute 2013.
- [97] Bagheri A, Abdolahi A, Saadati M. Socio-economic factors of value of children affecting ideal number of children by gender. *Soc Determ Health* 2017; 3(3): 132-40.
- [98] Campbell M, Bedford K. The theoretical and political framing of the population factor in development. *Philos Trans R Soc Lond B Biol Sci* 2009; 364(1532): 3101-13.
<http://dx.doi.org/10.1098/rstb.2009.0174> PMID: 19770159
- [99] Abbasi-Shavazi MJ, McDonald P, Hosseini-Chavoshi M. The fertility transition in Iran. Springer 2009.
- [100] Foster DG, Biggs MA, Ralph LJ, Arons A, Brindis CD. Family planning and life planning reproductive intentions among individuals seeking reproductive health care. *Womens Health Issues* 2008; 18(5): 351-9.
<http://dx.doi.org/10.1016/j.whi.2008.02.009> PMID: 18485738
- [101] Canning D, Schultz TP. The economic consequences of reproductive health and family planning. *Lancet* 2012; 380(9837): 165-71.
[http://dx.doi.org/10.1016/S0140-6736\(12\)60827-7](http://dx.doi.org/10.1016/S0140-6736(12)60827-7) PMID: 22784535
- [102] Baki-Hashemi S, Kariman N, Ghanbari S, Pourhoseingholi M-A, Moradi M. Factors affecting the decline in childbearing in Iran: A systematic review. *Adv Nurs Midwifery* 2018; 27(3): 11-9.
- [103] Velders FP, Dieleman G, Henrichs J, et al. Prenatal and postnatal psychological symptoms of parents and family functioning: The impact on child emotional and behavioural problems. *Eur Child Adolesc Psychiatry* 2011; 20(7): 341-50.
<http://dx.doi.org/10.1007/s00787-011-0178-0> PMID: 21523465
- [104] Stallard P, Norman P, Huline-Dickens S, Salter E, Cribb J. The effects of parental mental illness upon children: A descriptive study of the views of parents and children. *Clin Child Psychol Psychiatry* 2004; 9(1): 39-52.
<http://dx.doi.org/10.1177/1359104504039767>
- [105] Amato PR. The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *Future Child* 2005; 15(2): 75-96.
<http://dx.doi.org/10.1353/foc.2005.0012> PMID: 16158731

- [106] Eisenberg N, Fabes RA, Murphy BC. Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Dev* 1996; 67(5): 2227-47.
<http://dx.doi.org/10.2307/1131620> PMID: 9022240
- [107] Loeffler AG, Friedl E. The birthrate drop in Iran. *Homo* 2014; 65(3): 240-55.
<http://dx.doi.org/10.1016/j.jchb.2013.12.001> PMID: 24767720
- [108] Vedadhir A, Marjaei S. Social construction of population policies and problems in Iran since 1963. *Middle East Crit* 2023; 32(4): 507-22.
<http://dx.doi.org/10.1080/19436149.2023.2268860>
- [109] Farvardin F. Reproductive politics in Iran: State, family, and women's practices in postrevolutionary Iran. *Frontiers* 2020; 41(2): 26-56.
<http://dx.doi.org/10.1353/fro.2020.a765264>