Review Paper





The Factors Related to Gender Role Attitudes in Men and Women: A Narrative Review

Faeze Habibnejad¹ , Forouzan Elyasi² , Roya Nikbakht³ , Zohreh Shahhosseini^{4*}

- 1. Student Research Committee, Nasibeh School of Nursing and Midwifery, Mazandaran University of Medical Sciences, Sari, Iran.
- 2. Sexual and Reproductive Health Research Center, Psychiatry and Behavioral Sciences Research Center, Addiction Research Institute, Mazandaran University of Medical Sciences, Sari, Iran.
- 3. Department of Biostatistics and Epidemiology, Faculty of Health, Mazandaran University of Medical Sciences, Sari, Iran.
- 4. Department of Reproductive Health and Midwifery, Sexual and Reproductive Health Research Center, Mazandaran University of Medical Sciences, Sari, Iran.



Citation Habibnejad F, Elyasi F, Nikbakht R, Shahhosseini Z. The Factors Related to Gender Role Attitudes in Men and Women: A Narrative Review. Current Psychosomatic Research. 2023; 2(1):3-18. http://dx.doi.org/10.32598/cpr.2.1.146.1



ABSTRACT

Background and Objective: Attitudes towards gender role, like the attitudes towards the division of household work, marriage, work, and gender affairs, have a significant impact on social life. This study aims to review the factors related to gender role attitude in women and men.

Materials & Methods: In this narrative review study, a search in Google, ProQuest, MagIran, SID, PubMed, Google Scholar, library of Cochrane, IranDoc, Scopus, and Web of Science databases were first conducted using keywords in Persian and English for related articles published from 1998 to 2023. The included articles were research articles, descriptive studies, and review studies with a focus on factors related to gender role attitudes. Finally, after applying inclusion and exclusion criteria and removing duplicates, 22 articles were selected for the review.

Results: The results were categorized into two groups of psychological factors (parents' behaviors, personality, sexual abuse), and social factors (infertility, employment, gender, ethnicity).

Conclusion: Considering the importance of gender role attitudes and given that the change in attitude is a multifaceted phenomenon and is affected by several factors, interventions are needed to improve the gender role attitude in societies.

Keywords: Attitude, Gender role, Review

Article info:

Received: 11 Dec 2022 Accepted: 02 Mar 2023 Publish: 01 Aug 2023

Introduction



s a cultural schema, family is considered a powerful and life-shaping institution. A person's family beliefs also shape his/her internal model for public and private understanding of gender roles [1]. The gender role attitude is important in different areas, such as division of household work, marriage, work-related views and also the difference in issues related to women and men in social life. The basic principle of

* Corresponding Author:

Zohreh Shahhosseini, Professor.

Address: Department of Reproductive Health and Midwifery, Sexual and Reproductive Health Research Center, Mazandaran University of Medical Sciences, Sari, Iran.

Phone: +98 (911) 1558302 E-mail: zshahhosseini@yahoo.com



Copyright © 2024 The Author(s)

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC-By-NC: https://creativecommons.org/licenses/by-nc/4.0/legalcode.en), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

socialization theory indicates that values and attitudes are transferred from family to children and many socialization processes that affect children's attitudes, values and beliefs are influenced by the parental background (e.g. education, ethnicity and occupation of parents). Despite the fact that children undergo transformations during their lifetime due to many social changes and situations which prepare them for social life, the created family attitude also affects their decisions and behavioral changes [2, 3]. According to Linton's definition, "role" is a behavioral pattern that belongs to a specific social status [4], which regulates different norms and defines behavior in different social situations and is based on an interactive process. Therefore, gender roles are the roles that men and women are expected to play based on their gender; in the traditional way, the woman should be the nurturer and the man should take care of the family and provide financial support, while in modern roles, individual behaviors should not be determined based on gender and there should be equality between men and women, and people, regardless of gender, should accept the relevant roles based on their choices and participate equally in affairs [5]. The concept of gender is a socio-cultural process that is constantly changing over time [6] and is defined as male and female characteristics that are culturally and psychologically formed and developed in society. This definition of gender, which has been formed based on physiological differences, is a reason for gender inequality [7, 8]. Therefore, the attitude of people towards their own gender or the opposite gender based on their interaction with the environment and existing gender stereotypes, creates an image in the mind of a person that is not based on personal experience but is derived from surrounding culture and environment, and affects his/her behavior and attitude [8, 9]. Gender role attitude reflects existing beliefs about ideal behaviors for men and women, which is especially related to their acceptable participation in family and work roles [10].

In traditional societies, inequality and discrimination in relation to women is a normal thing, while in modern societies, women's views on gender roles and traditional values have changed and women, by increasing their awareness, are looking for ways to raise their status at all levels. With the latest developments, this view has become more prominent [11, 12]. Lower cultural inequality (emphasis on the gender discrimination ruling a country) can increase the economic growth of the country, and discrimination against women can be one of the barriers to the country's economic development. Therefore, women's participation in affairs brings positive effects, such as economic growth and development, improving the social status of women and their families, and reducing inequalities and gender discrimination [13].

Studies have shown a significant association between gender norms and health, indicating the impact of gender identity and attitudes on health behaviors [14, 15]. Given the important role of gender roles in women's health, numerous studies have explored women's health from different social perspectives, and have suggested that the differences in women's health status may because of an unequal distribution of social and family roles [15, 16]. The formation of gender role attitudes is affected by various biological, social, and cognitive factors, influencing individuals' psychological, physical, and social aspects of health [17-21]. Based on the findings of the related studies, there is a connection between gender role and individuals' behaviors and attitudes towards work, family, and marital life. Therefore, this study aims to investigate factors related to gender role attitudes among women and men, so that we can suitable platform for better understanding of this relationships.

Materials and Methods

This is narrative review study that was conducted in four phases: (a) Formulating research questions, (b) identifying relevant studies, (c) summarizing results, and (d) interpreting the findings. In the first phase, the primary research question was formulated as follows: What are the factors associated with gender role attitudes in both women and men? In the second phase, we performed an search for related studies published from 1998 to 2023 in English or Persian in online databases including Google, ProQuest, MagIran, SID, PubMed, Google Scholar, Cochrane Library of, IranDoc, Scopus, and Web of Science. Relevant keywords were determined using the Medical Subject Heading (MeSH) terms.

Inclusion criteria were being an descriptive-analytical, cohort, or review studies focusing on factors related to gender role attitudes. The studies that were not in Persian or English were excluded. In total, 97 studies were identified, of which 31 duplicates were removed using EndNote software. The full texts of the remaining articles were read, leading to the exclusion of 10 articles that was not related to the study question. Finally, 22 articles (6 in Persian and 16 in English) were selected for the review (Figure 1).

The full texts of the articles were carefully reviewed, and necessary information was extracted and summarized in tables by the author FH. To minimize bias, two authors (FH and ZS) independently conducted evaluations. In cases of disagreement, the third author (FA) reviewed the findings. The extracted information included the first author's name, publication year and country, study type, sample size, sampling method, tools, and key findings.

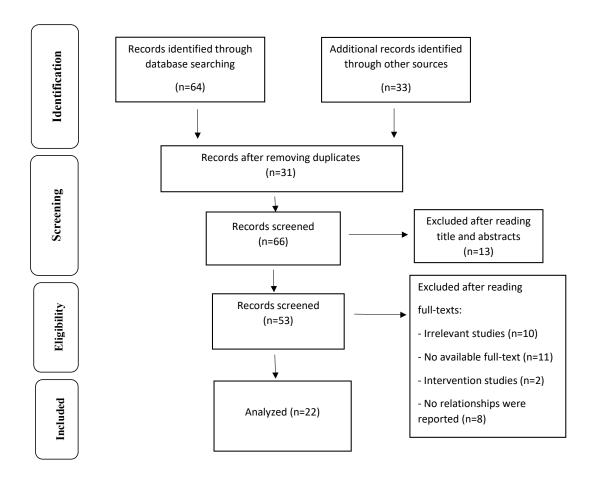


Figure 1. Flowchart of the article selection process

Current Psychosomatic Research

Results

Characteristics of the studies

The characteristics of 22 studies were reviewed. Six studies were conducted in Iran [12, 13, 22-25], one in Germany [19], one in Egypt [26], three in Turkey [2, 3, 27], four in the USA [1, 28, 29, 30], three in China [10, 31, 32], one in Europe [33], one in Jordan [8], one in Canada [34], and one in Korea [3] (Table 1). The sample sizes ranged from 246 to 45,466. The instruments included structured information forms, the gender role attitude scale (GRAS), the Cervantes personality scale (CPS) [3], and a questionnaire designed to assess gender role attitudes, parental sacrifice, subjective well-being, work-family conflict, social and economic status, education, and physical health status [35]. Participants included male and female school students, male and female college students, male and female employees, married women and men. Review findings categorized the factors affecting gender role attitudes into two main groups: Psychological and social (Table 2).

Psychological factors related to gender role attitudes

Parental behavior (strictness of parents)

Parents' behavior, specifically their degree of strictness towards their children to participate in social and personal activities, can significantly affect the development of gender role attitudes in children. Consequently, familial mechanisms play a crucial role in the formation of individuals' attitudes towards gender roles [13]. The sample size and the diversity of participants are among the strengths of this study [13].

Personality

Personality traits such as a neuroticism, sensitivity, introversion, emotional stability, negligence, openness, dominance, reasoning, inquisitiveness, diversion, mundane, and creativity are significantly related to the gender role attitudes. Each personality type is associated with different attitudes. For example, introverted people tend to have traditional attitudes, and women with neuroticism exhibit more traditional attitudes [3, 37]. One study had been conducted only in one high school; therefore, its findings may not generalized to all people.

Table 1. Characteristics of the reviewed studies

Author (y)	Title	Country	Type of Study	Sample Size	Tool	Main Findings
Miyata and Yamada, 2016 [26]	Do women's gender role attitudes affect work? Participation in the Egyptian market	Egypt	Analytical	45466	Panel review 1998-2006	The participation of women in the labor market significantly affected their daughters' involvement in the workforce. In Egypt, women with higher education face higher unemployment rates. The link between education and labor market behavior was not clearly established.
Aydin Ozkan and Kucuk- kelepce, 2019 [3]	Do university students' personality traits affect their attitudes towards gender roles?	Turkey	Cross-sectional	301 university students	Structured information form; Gender role attitude scale (GRAS); Cervantes personality scale (CPS)	Students with introverted personality traits had traditional attitudes (P<0.05). According to the female, marriage, traditional, and male gender role subscales, students with neurotic personality traits had more traditional attitudes.
Chen et al. 2022 [31]	Gender role attitudes and work-family conflict: A multiple mediation model including moderated mediation analysis	China	Cross-sectional	324 employees	Gender role attitudes scale; Parental sacrifice scale; Subjective well- being scale; Work-family conflict scale; Socioeconomic status and education scale; Physical health status scale	(1) Gender role attitudes significantly and positively predicted work-family conflict. (2) Parental sacrifice and subjective wellbeing played multiple mediating roles between gender role attitudes and work-family conflict. (3) Education level moderated the relationship between gender role attitudes and parental sacrifice, as evidenced by the fact that low education level amplified the positive predictive effect of gender role attitudes on parental sacrifice. (4) Subjective socioeconomic status moderated the relationship between gender role attitudes and subjective wellbeing, suggesting that high subjective socioeconomic status amplified the negative predictive effect of gender role attitudes on subjective well-being.
Shepherd, 2015 [33]	Gender Role Attitudes: An International European Study 1990- 2008	Europe	Retrospective cohort	-	Three waves of the European Values Study, 1990-2008	(1) Gender role attitudes have shifted at the cross-European level towards more progressive perspectives over time from 1990-2008, with men found to be lagging behind women's more liberal attitudes. (2) Welfare status is linked to gender roles. (3) Similarities in family-policy and socioeconomic contexts are mirrored by similar attitudes.
El Kharouf and Daoud, 2019 [8]	Gender role attitudes among higher education students in Jordan	Jordan	Cross-sectional	848	Demographic form; The gender professions scale and the gender skills scale	The attitudes of female youth toward gender roles are nontraditional in comparison to those of their male counterparts. Moreover, attitudes toward gender roles tend to be gender-balanced among older youth who live in urban areas, study in humanitarian colleges, and whose mother's educational level is high.

Author (y)	Title	Country	Type of Study	Sample Size	Tool	Main Findings
Gui, 2019 [32]	Gender role attitudes and their psychological effects on Chinese youth	China		404 undergraduate students in a Chinese university	-	Female students were more gender egalitarian than were male students. Female students with traditional gender role attitudes were more likely to be from rural than urban areas, display lower subjective health, and report lower life satisfaction. Male students with traditional gender role attitudes scored higher on life satisfaction than did traditional females. The results imply that exposure to urban living experiences leads to more egalitarian gender role attitudes, and that this attitude is accompanied by better psychological well-being for females.
Erarslan and Rankin, 2013 [2]	Gender role attitudes of female students single-sex and coeducational high schools in Istanbul	Turkey	Cross-sectional-analytical	295 female students	Demographic, socioeconomic and attitude survey questionnaire	The net of family background characteristics, students attending single-sex schools have more egalitarian attitudes toward family life roles than coeducational students, but school type does not matter for work and social life role attitudes. The socioeconomic composition of schools is also important, with students attending schools in the high socioeconomic status neighborhood having more egalitarian views on gender roles in family and social life.
Stickney and Konrad, 2007 [28]	Gender-role attitudes and earnings: A multinational study of married men and women	USA	Cross-sectional-analytical	4785 men and 4638 women from 28 countries located in the north and south America, Eastern and Western Europe, Mediterranean, Asia and the South Pacific.	Demographics; Gender role attitude index (GRAI)	Compared to individuals in their own countries, women with egalitarian attitudes had significantly higher earnings then women with traditional attitudes. In addition, for both women and men, we found an interaction between gender-role attitudes and hours worked.
Ullrich et al. 2022 [19]	The Development of gender role attitudes during adolescence: effects of sex, socioeconomic background, and cognitive abilities	Germany	Longitudinal cohort study	First wave: 5944 High school students Second wave: 8043 students Fourth wave: 5386 students Fifth wave: 5386 students Sixth wave: 3261 students	Kognitiver Fähigkeitstest and intelligence structure test	Adolescents developed more egalitarian gender role attitudes. Differences between the sexes decreased over time but remained significant. Socioeconomic status seemed less relevant, while adolescents, especially those with lower intelligence scores, developed more egalitarian gender role attitudes during adolescence. The results showed that teenagers developed more open and egalitarian attitudes during adolescence, and that the development trajectories of female and male adolescents converge.
Serajzadeh et al. 2006 [22]	Gender egalitarianism among students and contextual and attitudinal variables related to it	Iran	Cross-sectional-analytical	1522 male and female students from 21 universities in Iran	Measure of gender egalitarian attitude; A questionnaire surveying socio-economic, demographic , religiosity, political orientation, intellectual tolerance	Students were significantly inclined towards modern egalitarian attitudes about the division of gender roles; however, they still had traditional views in some fields. females were more egalitarian than males. Also, the variables of socio-economic status, residential area, intellectual tolerance, and reformist political reformism had a positive relationship with egalitarian attitudes, while religiosity had a negative relationship with it.

Author (y)	Title	Country	Type of Study	Sample Size	Tool	Main Findings
Updegraff et al. 2014 [29]	Mexican- American adolescents' gender role attitude development: the role of adolescents' gender and nativity and parents' gender role attitudes	USA	Descriptive-analytical	246 Mexicans	Hoffman and Kloska's (1995); Gender-based attitudes toward marital roles (GATMR); Individual and family characteristics: socioeconomic status scales	Among Mexico-born adolescents, females exhibited significant declines in traditional attitudes from early to late adolescence, but males' attitudes were stable over time. U.Sborn females and males, in contrast, did not differ in their gender attitude trajectories. on occasions when mothers reported more traditional attitudes relative to their own cross-time average, adolescents also reported more traditional attitudes than usual. In addition, fathers' more traditional gender role attitudes were associated with daughters, but not sons.
Unger et al. 2009 [34]	The relationship between a history of childhood sexual abuse and gender role attitudes	Canada	Descriptive-analytical	377 female students	Attitudes towards feminism scale; The neosexism scale; Societal violence scale	Traditional gender role attitudes, low income and social isolation were associated with childhood sexual abuse.
Siordia, 2016 [1]	On the Relationship between Gender Roles Attitudes, Religious Ideology and Familism in a Sample of Adults in the United States	USA	Cross-sectional-analytical	1,615	Traditional gender role ideology scale; Intensity of religious ideology scale; Familism scale (FS)	Results indicate a direct relationship between gender role ideology and the following: religious ideology and familism.
Lam et al. 2017 [35]	Development and correlates of gender role attitudes in African American youth	Korea	Cross-sectional-analytical	166 families with African American parents.	Gender-based attitudes toward marital roles scale	 Girls and boys exhibited significant declines in gender attitude traditionality from ages 9 to 15 that levelled off through age 18. Mothers' (but not fathers') gender role attitude traditionality was positively related to youth's attitude traditionality. Within-person variation in mothers' (but not fathers') racial discrimination experiences was negatively related to within-person variation in youth's gender role attitude traditionality.
Hu et al. 2021 [10]	The relationship between couples' gender-role attitudes congruence and wives' family interference with work	China	Cross-sectional-analytical	165 wives and 158 husbands	Gender role attitudes questionaire, Reilly's role overload scale; Netemeyer's work-family conflict scale	 (1) Wives' role overload is lower when husbands and wives are aligned in terms of gender-role attitudes than when they are not aligned. (2) On the condition of husband-wife congruence, role overload is positively correlated with their gender-role attitudes. (3) Role overload mediates the relationship between husband-wife congruence of gender-role attitudes.
Fazeli et al. 2014 [23]	The Relationship between Demographic Factors and Gender Role Attitudes in Women Referring to Mashhad Health Care Centers	Iran	Cross-sectional-analytical	712 females	A demographic and gender role checklist; A questionnaire with two sections of gender role stereotypes and gender equality	Stereotyped and egalitarian attitudes were significantly correlated with age, size of family, length of marriage, women's age at first birth, level of education, the intention to continue studying in the future, and the job status.

Author (y)	Title	Country	Type of Study	Sample Size	Tool	Main Findings
Çuhadaroğlu, 2021 [27]	The relationship between gender role attitudes and epistemological beliefs of university students.	Turkey	Cross-sectional-analytical	517 students from two universities, and 85 people	Personal information form; GRAS; Epistemological beliefs scale; A questionnaire consisting with 5 open-end questions	There was a significant relationship between the epistemological beliefs and gender roles. attitudes.
Beyerlein, 2007 [30]	Women's gender role attitudes: demographic characteristics, work-related factors, and life satisfaction	USA	Retrospective cohort	3507 young women	National longitudinal surveys (NLS)	(1) The demographic characteristics were education, age, marital status, and region of residence. Older women, married women, and those of Southern residence had traditional gender role attitudes. (2) Those with high educational levels had egalitarian attitudes. (3) Four work related variables (labor force participation, hours worked at one's paid position, personal income, and earnings as percent of total family income) were related to non-traditional gender role attitudes. (4) Job dissatisfaction was related to traditional gender role attitudes. Personal income. (5) Percent of total family income was related to traditional gender role attitudes, (6) Life dissatisfaction was related to egalitarian attitudes.
Sohrabzadeh et al. 2019 [12]	Rethinking female gender roles and cultural and social determinants related to it	Iran	Descriptive-analytical	600 married women	Demographics form; GRAS	21.5% of the respondents perceived the traditional roles as the most significant roles for women; 13% after high rethinking, reported low differences between male and female roles, while 65.5% had a moderate attitude. There was a significant relationship between the variables of age, employment status, educational level, income, socioeconomic status, duration of marriage, social media usage of women, and income and job status of their husbands, with their rethinking about gender roles. Educational level, socioeconomic status, usage of Instagram, wating TV, and husband's job status were the most important predictors of women's rethinking about gender roles.
Naseri and Naseri, 2015 [24]	Examining the factors affecting students' attitudes towards gender inequalities	Iran	Descriptive-analytical	400 university students	A researcher- made questionnaire	Gender, educational level, marital status, parents' attitudes, socio-economic status, and employment status had significant relationship with gender attitudes.
Riahi, 2007 [13]	Socio-familial factors affecting the gender attitude of young people in Mazandaran province	Iran	Descriptive-analytical	425 young men and women	A researcher- made questionnaire	Significant differences were observed between the gender role attitudes of young men and women, where males had more male-oriented gender attitudes than women. Also, rural and single people had more male-oriented gender attitudes than urban and married people. Gender role attitude is influenced by gender, job attitude, and how parents deal with their children.

Author (y)	Title	Country	Type of Study	Sample Size	Tool	Main Findings
Falahati, 2016 [25]	Gender role attitude with an emphasis on ethnicity and gender	Iran	Descriptive-analytical	400 male and female students of three public universities	Spence and Helmrich's attitude towards women role scale; Beere et al.'s sex-role egalitarianism scale; Suzuki's egalitarian sex role attitudes scale; Campbell's modern sexism scale	There was a significant difference between women and men in gender role attitude, where men had professional attitude and women had a liberal attitude. In terms of ethnicity, there was a significant difference in gender role attitude between women from Fars and Lor ethnicities, where women had a liberal attitude and men had a professional attitude. However, there was no significant difference between the two genders from Kurdish ethnicity; both genders had a liberal attitude. Regarding the Turkish ethnicity, there was no significant difference between the two genders; both had professional and traditional attitudes.

Current Psychosomatic Research

Sexual abuse

Traditional attitudes and social isolation are generally related to childhood sexual abuse. Parents' attitudes can significantly affect their children's future behaviors. According to Unger et al. [34], women who experienced unwanted sex in childhood and adolescence, are more likely to grow up in families with traditional attitudes. Girls with traditional gender role attitudes may adopt

a weak approach towards the environment and themselves, such that they accept to surrender to abusers. On the other hand, this experience may lead to the strengthening of the belief that women should be exploited and used by others, which is in in line with traditional gender role attitudes [39]. However, the studies did not investigate the fact that the psychological trauma after sexual abuse creates a defense mechanism in women and girls to confront inequality and masculinity.

Table 2. Factors affecting gender role attitudes

Factors	Category
Psychological	Personality [3] Parents' behaviors with children (strictness of parents) [13] Intellectual tolerance [22] Epistemological beliefs [27] Sexual abuse [34]
Social	Infertility [37] Parents' attitude and occupational status [24-26, 29, 35] Employment status, job attitude and dignity [13, 24, 38] Gender attitude of couples towards each other [10] Attitude change over time [33] Women's age at first birth [23] Age [12, 13, 19] Gender [8, 13, 39, 40] Educational level, the intention to continue studying, type of universities or schools (government or private, single-sex or mixed-gender) [2, 8, 10, 13, 25, 39, 41] Marital status [13] Place of residence (rural or urban) [13, 32, 40] Ethnicity [25, 35, 38] Religious ideology and familism [1, 39, 40]. Work-family conflict [31] Income level [21, 28] Duration of marriage and number of children [12] Social media usage of women [12] Culture [21, 28] Political orientation [22]

Current Psychosomatic Research

Epistemological beliefs

Epistemological beliefs refer to an individual's perception of knowledge and learning. A significant connection exists between epistemological beliefs and attitudes toward gender roles. Individuals with more mature and evolved epistemological beliefs, who are trying to learn and accept different beliefs, tend to have more egalitarian attitudes compared to those with traditional epistemological beliefs, who have more traditional attitudes [27]. The disadvantages of the study in reference no.28 are the inability to generalize the qualitative findings due to data collection only from two universities.

Intellectual tolerance

Intellectual tolerance refers to being agree about the freedom of speech. There is a direct and significant relationship between intellectual tolerance and gender equality, suggesting that acceptance of gender equality is characteristic of individuals who value intellectual tolerance. People with intellectual tolerance allow everyone to share their opinions and ideas. This egalitarian idea also helps women benefit from more social opportunities [22].

Social factors related to gender role attitudes

Infertility

The assisted reproductive techniques may reinforce pronatalism and patriarchal structures instead of leading to a future revolution in family life [30, 41]. Infertility may cause hardships for couples; therefore, it seems that parents should be egalitarian and understand each other in the upbringing of their children and their related matters that are under their supervision.

Parents' attitude and occupation

The attitude towards women affect social structures at various macro, meso, and micro levels. Consequently, parents' attitudes play a crucial role in shaping social and cultural norms. According to the studies, the traditional attitude of mothers is lower than fathers', affecting children's attitude. When parents reported more traditional attitudes, adolescents also reported more traditional attitudes. Among children with different genders, the parents' attitudes influence female children more than male children [25, 26, 29, 35]. Therefore, the level of importance or credit given to women in the society is one of the indicators for measuring the development level of that society. Parents' occupational status is also one of the factors that significantly affects an individual's at-

titude towards gender roles is society and family [24]. In the results of the studies, single parents or parents with deprived socio-economic status were not considered, but in general, many African, American, and Mexican races were investigated. By adjusting the attitudes toward gender roles and improving traditional and stereotypical beliefs, many discrepancies and inconsistencies can be reduced, which, in addition to reducing gender discrimination in various fields, can have a significant impact on the quality of individual and family life and overall satisfaction with life.

Employment, job attitude and job status

In the field of job status, there are different views on gender, such that men often believe that important jobs and the works that need high power should be entrusted to them and women as less capable than them in intellectual, managerial, and social positions and it is better for women to do housework and jobs such as nursing and teaching, and they should be obedient to men in their personal and family matters. However, women have different and even opposite views. According to studies, men with traditional jobs often have traditional attitudes [13, 38]. One of the positive effects of women's participation in the labor force is the flourishing of their personality, family welfare, and community development. Women with higher levels of family welfare and income have more rethinking in gender roles. Women's employment can greatly change their attitudes within family and work relationships [13, 24]. Also, the wives of men with higher income and more positive attitudes in this field have more rethinking in gender roles. Furthermore, an individual's job status plays an important role in his/her gender roles attitudes within society and family.

Couples' attitudes towards each other

If there are differences in gender role attitudes between couples, there will be a role overload in them, which can cause problems in their personal and professional duties and lead to the involvement of others, including the families of couples. On the other hand, if they have consistent attitudes, it will show their compatibility and reduce the involvement of others [10]. The study used a self-report method and had a cross-sectional design which are considered as the study disadvantages. Research for investigating the cause-and-effect relationships in this field is needed.

Attitude change over time

The changes within families are the result of extensive social, economic, and cultural changes over time. The increase in women's employment has had the most impact on family dynamics and gender roles. Gender role attitudes at cross-European level shifted towards more progressive views over time from 1990 to 2008, and men lagged behind women's more liberal attitudes. It seems these countries more accept women's evolving biographies but that gender inequalities remain, and men's attitudes continue to lag behind conservative those of women [38]. The data for these findings were gathered from three waves of the European Values Study with high sample size which are the strengths of this study.

Maternal age at first birth

Fazeli et al.'s study, conducted in Mashhad, Iran, in 2014, demonstrated a correlation between the age of mothers at first birth and their attitudes towards gender roles, with older age at first birth associated with more egalitarian views and less stereotypes towards gender roles [23]. This study's strengths are its large sample size and the diversity of its participants from various centers.

Age

Age is a important factor influencing attitudes towards gender roles, and even in rethinking about these views. Different age groups have different attitudes. Adolescence is a important stage for changes in attitude, where the experiences play a significant role in forming the attitudes in adulthood, which is due to cognitive maturation against gender norms [12, 13, 19].

Gender

Gender, is one of the factors that have less effect on egalitarian attitudes in studies. Other factors such as place of residence, marital status, and ethnicity along with gender can affect traditional and non-traditional attitudes. Significant gender differences in thoughts, attitudes, actions, and behaviors can be seen in the culture of every society [8, 13, 39, 40]. Gender, in addition to the culture governing societies, can be the micro factors affecting gender role attitudes, which has been as strongly emphasized in studies.

Educational level, willingness to continue education, level of universities and schools (government or private, single-gender or mixed-gender)

Th effect of education on egalitarian gender role behaviors is less than the effect on egalitarian gender role attitudes; however, education does cause changes in attitude. Although gender stereotypes affect educational choices, educational level is still correlated with egalitarian gender role attitudes [41]. People with higher educational level have higher egalitarian attitudes. People with traditional attitudes may tend to have higher education, which makes it possible to revise their attitude during their education. These changes in attitudes during education occur in both women and men, where it is greater in women. The women with formal education have more egalitarian attitudes, and men's higher education levels causes them to rethink their gender role attitudes [2, 8, 10, 13, 25, 30]. Egalitarian attitudes of mothers can significantly influence their children's educational progress. Regardless of family background, students from single-sex schools and schools with high socio-economic status have more egalitarian attitudes toward gender roles than those from mixed-gender schools or those with lower socio-economic status [2]. Furthermore, education in humanitarian colleges can fosters egalitarian attitudes in students [8].

Marital status

Riahi's study in 2013 in Mazandaran, Iran revealed a significant correlation between marital status and gender role attitudes. Rural single men showed more patriarchal attitudes than urban married women, although the place of residence also affect the attitudes [13]. Although these results are acceptable and the sample distribution is appropriate, we cannot draw a definitive conclusion based on a single study.

Place of residence (urban or rural areas)

Rural people generally have more traditional gender role attitudes than urban residents. Exposure to urban life experiences leads to a desire for greater equality, associated with improved psychological well-being for women [13, 31, 40].

Nationality

Attitudes towards gender role are also different among ethnicities, affected by cultural differences. Traditional ethnicities have lower egalitarian attitudes, while in ethnicities such as Kurds, there's no noticeable difference in gender role attitudes between men and women [25, 39,

40]. The culture of various ethnicities is not stable; exposure to different cultures and ideas challenges traditional gender role expectations and promote more progressive attitudes. Factors such as marriage or migration are also effective in fluidity of ethnicity, making a person receptive to new ethnic attitudes [36].

Religiosity and familism

The induction of religious/spiritual values in family and religious ideologies significantly affect attitudes toward gender roles. The factor of religion plays an important role in the socialization of gender roles. The effects of familism and religiosity persist where gender inequality persists and the beliefs about how men and women should behave are associated with the least gender equality. Studies also indicated the strong relationship of religiosity and spirituality with ethnicity. Both familism and religiosity also influence current gender role beliefs. They can help individuals to deal with inequality and injustice. people with stronger familism and religious beliefs tend to exhibit more patriarchal attitudes than their counterparts [1, 39, 40]. The high sample size is a strength of these studies. In the study by Heard et al. [39], individuals aged >65 were excluded due to the limitations caused by the used instrument, while that those over 65 can provide useful information about generational differences in gender role attitudes and the experiences of gender role socialization

Work-family conflict

There is also a positive correlation between gender role attitude and work-family conflict, where an egalitarian attitude can help reduce this conflict. This relationship based on factors such as sacrifice of the parents, mental well-being, education level, and socio-economic status, all of which have a key role in improving attitudes [31].

Income level

A positive correlation also exists between gender role attitudes and income level, such that a significant association between work hours and income level among individuals with egalitarian attitudes was observed. Studies indicate that women with egalitarian attitudes generally earn significantly more than those with traditional attitudes, and men working in high-skilled and high-income jobs tend to show more egalitarian behaviors. Overall, married men and women with egalitarian gender role attitudes report significantly higher work hours and income levels compared to their counterparts with more traditional attitudes [12, 29].

Duration of marriage and number of children

Additionally, the length of marriage and the number of children have an inverse and significant relationship with women's rethinking of gender roles in social, occupational, and family contexts. Those with higher number of children and longer duration of marriage tends to have more traditional attitudes [12].

Social media usage

The mass media of any society is influenced by its culture. Television programs of Iran recognize differences between men and women and present that difference in many ways in line with social norms, leading to portraying traditional gender roles, but online social networks provide the possibility of a wider level of communication, which causes a revise of gender roles and portrays the non-traditional role of women and strengthens the rethinking of gender roles in women [12].

Culture

Cultural expectations and pre-determined beliefs also significantly influence gender role attitudes which can change under influence of culture. Different cultures, due to the effect of different social, historical, and religious factors, have different expectations, beliefs, and norms regarding the roles of men and women. Cultural norms and values highly affect attitudes towards gender roles. In cultures with traditional attitudes, people adhere to these norms more, while the cultures that prioritize gender equality promote a more progressive attitude towards gender roles and greater gender equality [21, 39]. These findings were derived from cross-sectional and analytical studies using questionnaires. Despite the limitations caused by the use of questionnaires, they can be useful if they are localized for the specific country and culture. However, the prevailing culture of a society still potentially affect the attitudes.

Political orientation

The active political groups in Iran include reformists and principlists. The reformists favor new perspectives, and show a more egalitarian attitude towards gender roles [22].

Discussion

This study aimed to review factors related to gender role attitudes, categorizing them into psychological and social factors. Gender role attitude refers to the way one look at the abilities and rights of women and men in a society, only a port of which may be compatible with reason, religion, culture, and local regulations. Cultural expectations regarding gender roles are imparted to society's members through socialization, forming individuals' attitudes towards their roles according to societal norms or expectations [12, 24]. The findings of studies indicated that various factors, including gender, age, educational level, and job play a role in forming gender role attitudes [8, 12, 13, 19, 25, 30, 40].

The psychological factors included parents' behaviors with children (strictness of parents), personality traits, sexual abuse, epistemological beliefs, and intellectual tolerance. In a study, Riahi found that the parents' behaviors with children (specifically, the degree of freedom and authority that parents give to their children in having individual and social behaviors) directly affect gender attitudes, where the parents with more strictness often have children with more patriarchal attitudes. Additionally, this factor is directly related to the place of residence and parents' employment status and educational level [13]. Ozkan et al.'s study on personality traits revealed that students with neurotic and introverted personalities had more traditional attitudes towards gender roles, marriage, and societal responsibilities. Sensitive students had traditional attitudes [3]. A study by Unger et al. showed that childhood sexual abuse, as a psychological factor, is more prevalent among people with traditional attitudes, indicating this belief that women should be exploited and used by others [34]. However, this study had with disadvantages. For example, they only assessed female students from a Canadian university, and used the retrospective questions about childhood memories, which could be influenced by passage of time and personal bias. They did not assess sexual abuse in males and other influencing factors and their correlations. Çuhadaroğlu showed the relationship between gender role attitudes and epistemological beliefs; as the score of epistemological beliefs scale increased, attitudes became more traditional. However, individuals with more developed and mature epistemological beliefs had egalitarian attitude [27]. Serajzadeh indicated the effect of intellectual tolerance and revealed that an egalitarian attitude increases with greater intellectual tolerance. According to their findings, there is a direct relationship between egalitarian attitude and factors such as female sex, socioeconomic status, parents' education and occupation, and intellectual tolerance, while it had an inverse relationship with political attitudes [22].

Regarding social factors, infertility shown by a comparative study of China and Taiwan, is a factor that affects gender role attitudes [37]. Studies also showed the effect of job status. Lehsaizadeh in a study in Shiraz, Iran on factors affecting the attitude of men compared to women found a significant relationship between gender role attitudes and job status in men compared to women [42]. Regarding the job attitude as another social factor, a study reported that men believed that important job and the works that need high power should be given to them, and the ability of women in doing intellectual, managerial, and social jobs is less than them, while women had opposing views [6]. Generally, there's a link between the gender role attitudes of mothers, fathers, and children [29, 35]. Riahi indicates that traditional job attitudes (job assignment based on gender) can lead to male-oriented gender attitudes [13]. Inconsistent gender role attitudes between couples can lead to conflicts in various aspects of marital life. On the other hand, their consistent attitudes reflects a stability in personal values and expectations from each other. A study in China showed that family support by men, which is based on an egalitarian attitude, can reduce women's psychological pressure [10]. Attitudes change over time. A research by Sheppard et al. suggested that this evolution is influenced by factors such as mother's employment, career achievement, and financial independence, all of which have undergone positive changes in recent decades [33]. Other social factors including age, family size, duration of marriage, age at first birth, educational level, intention to continue studying in the future are correlated to egalitarian attitudes. The experiences of young people and adolescents significantly influence their gender role attitudes in adulthood. The entry of women and girls into universities has made them aware of their rights in society. According to the studies, the gender role attitudes change during education which is different between women and men; women with formal education show more egalitarian attitudes towards marriage, childbirth, childcare, and domestic chores. A higher education in men also causes a rethinking of gender attitudes towards their wives. Mothers' gender role attitudes significantly affect their behaviors with their children and can cause academic success in their children [6, 14, 25, 30, 32]. The gender factor can also significantly affect attitudes towards gender roles. El Kharov and Daoud in a study showed that young women had non-traditional attitudes compared to their male counterparts. Furthermore, young adults living in urban areas exhibit more balanced gender role attitudes [8]. The effect of marital status on gender role attitudes was reported by Riahi, where rural and single men showed more traditional attitudes than

urban and married women [13]. The place of residence thus also plays a role in forming attitudes, which is also indicated by Gui, where female students living in rural areas had more traditional attitudes compared to those living in urban areas [32]. Ethnicity and religiosity also influence gender role attitudes [39]. Traditional gender role attitudes are prevalent among people with strong religious beliefs [1]. Gender role attitudes can indirectly predict work-family conflict; egalitarian attitudes can reduce these conflicts [31].

Higher income level in women can also significantly affect their attitudes towards gender roles. Men with higher levels of income have more progressive attitudes towards gender roles. Furthermore, the number of children has an inverse and significant correlation with rethinking about gender roles in social, occupational, and family contexts. Moreover, access to online social media has made women and girls to have egalitarian attitudes [6, 11, 14]. The results of a study showed the negative significant association of watching TV programs and the positive significant correlation of using Instagram and Facebook with rethinking about gender roles in women. Mass media in Iran is influenced by social culture. It provides programs about the different gender roles of men and women and suggest their traditional roles [12]. This is while women are moving towards having egalitarian attitudes, far from traditional attitudes. Given that reformists in Iran are the supporters of modern attitudes in social and political fields, it seem they seem have more egalitarian attitudes compared to principlists. Serajzadeh et al. reported that reformist college students showed more egalitarian attitudes than other political groups in Iran [22].

Conclusion

There are psychological and social factors that affect gender role attitudes. It is important to consider long-term planning regarding these factors. Since attitudes in childhood are influenced by education, living conditions, and prevailing gender stereotypes, it is possible to create positive attitude in childhood by providing educational interventions, ultimately improving the attitudes of people in the society. To institutionalize the desired attitude, a multiple approach with the participation of the individual, family and social institutions is necessary. Moreover, policymakers are recommended to create policies ti improve attitudes among women and men based on the factors identified in this study.

This is the first review study that investigated the factors affecting gender role attitudes which can be considered as one of its strengths. However, we did not employ a systematic approach and we did not assess the quality of reviewed studies. Future research is reported to assess the role of psychological, educational, and counseling interventions in fostering gender role attitudes in both women and men.

Ethical Considerations

Compliance with ethical guidelines

All publication ethics including the avoidance of scientific misconducts (data fabrication, plagiarism, and re-submitting work for duplicate publication) were observed

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors' contributions

Supervision and project administration: Zohra Shah Hosseini; Research, resources, writing initial draft, editing and review: Faezeh Habibnejad; Conceptualization and supervision: Forozan Eliasi and Roya Nikbakht.

Conflict of interest

The authors declared no conflicts of interest.

Acknowledgments

The authors would like to thank the library staff of the School of Nursing and Midwifery in Sari, Iran.

References

- [1] Siordia C. On the Relationship between gender roles attitudes, religious ideology and familism in a sample of adults in the United States. J Int Women's Stud. 2016; 17(4):229-44. [Link]
- [2] Erarslan AB, Rankin B. Gender role attitudes of female students in single-sex and coeducational high schools in Istanbul. Sex Roles. 2013; 69:455-68. [DOI:10.1007/s11199-013-0277-0]
- [3] Aydin Ozkan S, Kucukkelepce DS. Do university students' personality traits affect their attitudes towards gender roles?

- Perspect Psychiatr Care. 2019; 55(4):562-9. [DOI:10.1111/ppc.12375] [PMID]
- [4] Cloyd JS. Patterns of role behavior in informal interaction. Sociometry. 1964; 27(2):161-73. [Link]
- [5] Blackstone AM. Gender roles and society. In: Miller JR, Lerner RM, Schiamberg LB, editors. Sociology school faculty scholarship. Orono: University of Maine - Main; 2003. [Link]
- [6] Wharton AS. The sociology of gender: An introduction to theory and research. New Jersey: John Wiley & Sons; 2009. [Link]
- [7] Kessler SJ, McKenna W. Gender: An ethnomethodological approach. Chicago: University of Chicago Press; 1985. [Link]
- [8] El Kharouf A, Daoud N. Gender role attitudes among higher education students in Jordan. Mediterr J Soc Sci. 2019; 10(4):63-75. [DOI:10.2478/mjss-2019-0053]
- [9] Lindsey LL. Gender roles: A sociological perspective. New York: Routledge; 2015. [DOI:10.4324/9781315664095]
- [10] Hu Y, Li J, Ye M, Wang H. The relationship between couples' gender-role attitudes congruence and wives' family interference with work. Psychol Res Behav Manag. 2021; 14:49-59. [DOI:10.2147/PRBM.S286119] [PMID]
- [11] Sarukhani B, Rafarjah M. [Effective sociological factors in redefining women's social identity (Persian)]. Woman Dev Polit. 2013; 2(1):71-91. [Link]
- [12] Sohrabzadeh M, Shoa S, Niazi M, Mohed M. [Rethinking female gender roles and cultural and social determinants related to it (case study: married women in Shiraz) (Persian)]. Educ Cult Women Fam. 2018; 14(49):111-87. [Link]
- [13] Riahi ME. [A study on impacts of socio-familial factors on gender-related attitude of youths in the Mazandaran province (Persian)]. Soc Welfare Q. 2007; 6(25):169-94. [Link]
- [14] Brabete AC, del Pilar Sánchez-López M. How does the gender influence people's health? Data of a sample of Romanian people living in Spain. Procedia Soc Behav Sc. 2012; 33:148-52. [DOI:10.1016/j.sbspro.2012.01.101]
- [15] Esteban-Gonzalo S, Aparicio M, Estaban-Gonzalo L. Employment status, gender and health in Spanish women. Women Health. 2018; 58(7):744-58. [DOI:10.1080/03630242.2017.1353574] [PMID]
- [16] Malmusi D, Vives A, Benach J, Borrell C. Gender inequalities in health: Exploring the contribution of living conditions in the intersection of social class. Glob Health Action. 2014; 7:23189. [DOI:10.3402/gha.v7.23189] [PMID]
- [17] Vafaei A, Ahmed T, Freire Ado N, Zunzunegui MV, Guerra RO. Depression, sex and gender roles in older adult populations: The International Mobility in Aging Study (IM-IAS). PloS One. 2016; 11(1):e0146867. [DOI:10.1371/journal. pone.0146867] [PMID]
- [18] Akyüz Özdemir A, Sayın CB, Erdal R, Özcan C, Haberal M. Quality of Life Through Gender Role Perspective in Candidate Renal Transplant Recipients: A Report From Başkent University Using the Short Form 36 Health Survey. Exp Clin Transplant. 2018; 16 Suppl 1(Suppl 1):28-34. [PMID]
- [19] Ullrich R, Becker M, Scharf J. The development of gender role attitudes during adolescence: Effects of sex, socioeconom-

- ic background, and cognitive abilities. J Youth Adolesc. 2022; 51(11):2114-29. [DOI:10.1007/s10964-022-01651-z] [PMID]
- [20] Engel GL. The need for a new medical model: A challenge for biomedicine. Science. 1977; 196(4286):129-36.
 [DOI:10.1126/science.847460] [PMID]
- [21] Alavi K, Eftekhar M, Jalali Nadoushan AH. Comparison of masculine and feminine gender roles in Iranian patients with gender identity disorder. Sex Med. 2015; 3(4):261-8. [DOI:10.1002/sm2.79] [PMID]
- [22] Serajzadeh SH, Javaher F. [Gender egalitarianism among students and contextual and attitudinal variables related to it (Persian)]. Iran J Soc. 2015; 7(2):3-40. [Link]
- [23] Fazeli E, Golmakani N, Taghipour A, Shakeri MT. The relationship between demographic factors and gender role attitudes in women referring to Mashhad Health Care Centers in 2014. J Midwifery Reprod Health. 2015; 3(1):276-84. [DOI:10.22038/JMRH.2015.3561]
- [24] Naseri S, Naseri M. [Studying effective factors on university student's attitude towards gender inequalities (Persian)]. Ilam Cult. 2017; 17(52-53):98-114. [Link]
- [25] Falahati L. [Gender role attitude with an emphasis on ethnicity and gender (Persian)]. J Iran Cult Res. 2016; 9(1):33-59. [Link]
- [26] Miyata S, Yamada H. Do female gender role attitudes affect labour market participation in Egypt? J Dev Stud. 2016; 52(6):876-94. [DOI:10.1080/00220388.2015.1113262]
- [27] Çuhadaroğlu A. The relationship between gender role attitudes and epistemological beliefs of university students. Eur J Educ Stud. 2021; 8(4). [DOI:10.46827/ejes.v8i4.3698]
- [28] Stickney LT, Konrad AM. Gender-role attitudes and earnings: A multinational study of married women and men. Sex Roles. 2007; 57:801-11. [DOI:10.1007/s11199-007-9311-4]
- [29] Updegraff KA, McHale SM, Zeiders KH, Umaña-Taylor AJ, Perez-Brena NJ, Wheeler LA, et al. Mexican-American adolescents' gender role attitude development: The role of adolescents' gender and nativity and parents' gender role attitudes. J Youth Adolesc. 2014; 43(12):2041-53. [DOI:10.1007/ s10964-014-0128-5] [PMID]
- [30] Beyerlein M. Women's gender role attitudes: Association of demographic characteristics, work related factors, and life Satisfaction. Denton, Texas, USA: University of North Texas; 2007. [Link]
- [31] Chen G, Zhang J, Hu Y, Gao Y. Gender role attitudes and work-family conflict: A multiple mediating model including moderated mediation analysis. Front Psychol. 2022; 13:1032154. [DOI:10.3389/fpsyg.2022.1032154] [PMID]
- [32] Gui Y. Gender role attitudes and their psychological effects on Chinese youth. Soc Behav Personal Int J. 2019; 47(5):1-8. [DOI:10.2224/sbp.7563]
- [33] Shepherd C. Gender role attitudes: A European cross-national study, 1990-2008. Manchester: The University of Manchester; 2015. [Link]
- [34] Unger JA, Norton GR, De Luca RV. The relationship between a history of childhood sexual abuse and gen-

- der role attitudes.J Child Sex Abus. 2009; 18(6):641-54. [DOI:10.1080/10538710903308207] [PMID]
- [35] Lam CB, Stanik C, McHale SM. The development and correlates of gender role attitudes in African American youth. Br J Dev Psychol. 2017; 35(3):406-19. [DOI:10.1111/bjdp.12182] [PMID]
- [36] Endendijk JJ, Beltz AM, McHale SM, Bryk K, Berenbaum SA. Linking prenatal androgens to gender-related attitudes, identity, and activities: Evidence from girls with congenital adrenal hyperplasia. Arch Sex Behav. 2016; 45(7):1807-15. [DOI:10.1007/s10508-016-0693-7] [PMID]
- [37] Tu SH, Liao PS. Gender differences in gender-role attitudes: A comparative analysis of Taiwan and Coastal China. J Comp Fam Stud. 2005; 36(4):545-66. [DOI:10.3138/jcfs.36.4.545]
- [38] Berenbaum SA, Beltz AM. Evidence and implications from a natural experiment of prenatal androgen effects on gendered behavior. Curr Dir Psychol Sci. 2021; 30(3):202-10. [DOI:10.1177/0963721421998341] [PMID]
- [39] Heard CC. Sex-role egalitarian attitudes and gender role socialization experiences of African American men and women: A mixed methods paradigm. Texas: Texas A&M University-Corpus Christi; 2013. [Link]
- [40] Manganaro LL, Alozie NO. Gender role attitudes in Afghanistan. In: Michalos AC, editor. Encyclopedia of quality of life and well-being research. Dordrecht: Springer Netherlands; 2014. [DOI:10.1007/978-94-007-0753-5_4136]
- [41] Du H, Xiao Y, Zhao L. Education and gender role attitudes. J Popul Econ. 2021; 34:475-513. [DOI:10.1007/s00148-020-00793-3]
- [42] Lahsaeizadeh AA. [Factors affecting men's attitude toward women's role in society: A case study of Shiraz (Persian)]. J Soc Sci Humanit Shiraz Univ. 2001; 16(2):99-130. [Link]

