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Original Article

Relationship Between Spiritual Intelligence and Attitude Toward Fertility and Childbearing in Women

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ABSTRACT

Objective: This study aims to determine the relationship between spiritual intelligence (SI) and attitudes toward fertility and childbearing in reproductive-age women.

Methods: About 199 women of reproductive age were included in this cross-sectional analytical study. A convenience method has been used for sampling. A 3-part questionnaire, including demographic information forms, SI questionnaires, and childbearing attitude questionnaires, has been used as a data collection tool. Data are analyzed using the Kruskal–Wallis, Spearman's correlation coefficient, and Mann–Whitney *U*-test, a multi-linear regression statistical test ($P < .05$).

Results: The mean score of SI was 53.18 ± 9.88, and the mean score of toward fertility and childbearing was 54.94 ± 9.43. The total score of SI and the total score of attitude toward fertility and childbearing were strongly correlated ($P = .049$, $r = 0.140$). Significant positive relationship was between the total score of the attitude toward fertility and childbearing and the scores of the SI dimensions, including critical existential thinking ($P = .035$, $r = 0.150$) and conscious state expansion ($P = .034$, $r = 0.150$). A significant relationship between the SI total score and children as the base of life's score was identified when it was assessed about dimensions related to attitudes toward fertility and childbearing ($P = .005$, $r = 0.197$).

Conclusion: The overall SI score and the general attitude toward fertility and childbearing are strongly correlated. Consequently, the attitudes of women toward fertility and childbearing can be improved by counseling intervention and developing training programs regarding SI.

Keywords: Spirituality, intelligence, attitude, childbearing, fertility

Introduction

During recent years around the world, with the expansion of the process of modernization, the foundation of the family has undergone many changes, and among these, childbearing has faced transformation more than other values of the family.[1] In recent years, Iran has experienced a severe decline in childbearing in the world.[2] Iran experienced a rapid decline, with a reduction of 2.28 births per woman, from 3.9 to 1.62 births per woman in 30 years. The decrease is the result of population reduction policies in this country.[3] The population crisis threatens the country's future, so the society will face an aging population shortly, which will have negative consequences in terms of economic and social aspects.[4] It seems that, in addition to social factors and macro policies of the country, fertility decline can be attributed to cultural, social, and economic changes.[5] Women's fertility attitude is one of the most important influencing factors in fertility behavior.[6,7] Therefore, since behavior and performance can reflect people's attitudes, changing the attitude and creating a negative attitude about childbearing leads to a decrease in the birth rate.[8,9] One of the cultural factors that have a conflicting effect on childbearing is religious beliefs and spirituality.[10]

Religion is a specific set of organized beliefs and practices, usually shared by a community or group.[11] Spirituality is more of an individual practice and involves having a sense of peace and purpose.[12] Spirituality is about values, meanings, and experiences that reflect a person's inner beliefs

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and moral essence.[13] It is an expression of affective states and spiritual experiences that are expressed through action or opinion.[12] Spiritual intelligence is the ability to use spiritual resources to solve problems and attain goals.[14]

Spiritual intelligence is an inner capacity to reach a high level of self-awareness that gives a person the ability to distinguish right from wrong, face difficulties, and increase flexibility in different situations.[15] Spiritual intelligence is considered to be an integrating intelligence that links one's emotional and rational intelligence and is therefore regarded as the ultimate intelligence.[16]

In their study, Khadivzade et al[17] concluded that religious tendency is an important predictor of women's desire to have children. Also, Kalantari et al[18] showed the positive effect of religious tendency on the desire for childbearing. However, the results of a study in Bangladesh, Indonesia, and Nigeria have shown that the influence of religious beliefs on the fertility rate in these countries has decreased slightly due to various reasons, including technological progress and the process of modernity.[19]

According to Bussing et al,[20] SI is the awareness of spirituality as a source of existence or creative life in development and an evolving set of potential adaptation ideas that are based on unphysical forces and transcendent aspects of real reality. Spiritual intelligence gives people a general view of life phenomena and events, and enables them to gain sufficient knowledge about a specific subject and make the right decision when necessary.[15]

Today, despite an increase in our knowledge about SI, the nature of its mutual relationships with attitudes toward fertility and childbearing is less known. Besides, the mental aspects related to attitudes toward fertility and childbearing issues vary in different societies, highlighting the importance of a better understanding of the mental aspects of childbearing issues in our country in parallel with the development of population interventions. Therefore, this study aims to determine the relationship between SI and attitudes toward fertility and childbearing in reproductive-age women.

Methods

Study Design

Research setting of this cross-sectional analysis study was comprehensive health centers in Gulian' University of Medical Sciences in Rasht, Iran.

Sampling

The participants, who were women of reproductive age, were entered into the study using a convenience method from October to November 2023. The inclusion criteria in this study were an age of 15-49 years, giving consent for participation in the study, Iranian nationality, being able to understand the Persian language, and not being in menopause. Additionally, incomplete questionnaires were excluded.

Sample Size

The sample size follows the sampling formula by determining $\alpha = 0.05$ and $\beta = 0.2$ (power of 0.8). Using the researcher's expectation, the correlation coefficient of 0.2 was determined as the appropriate value of correlation between the studied variables. The sample size was equal to 193 women; due to the possibility of non-response (approximately 15%) and to increase the accuracy of the study, at least 227 women were included in the study.

$$n = \left(\frac{z_\alpha + z_\beta}{C(r)} \right)^2 + 3$$

$$C(r) = \frac{1}{2} \log_e \frac{1+r}{1-r}$$

Data Collection

In the data collection process, the participants, in relation to the inclusion criteria, were recruited for this study using the convenience sampling from all 16 comprehensive health centers in Rasht city. After explaining the purpose of the study, informed consent was obtained for participation, and the participants were assured of the confidentiality of their personal data.

Data Collection Tools

The study instrument was a 3-part self-administered questionnaire including demographic characteristics, questionnaires of SI, and the attitude toward fertility and childbearing.

Demographic Characteristics

The first part included 14 individual characteristics (including age, age of marriage, husband's age, history of stillbirths and abortions, ethnicity, spouse's ethnicity, duration of using the Internet and virtual networks, education level, spouse's education level, occupation, spouse's occupation, number of children, economic status, and housing status).

King's Spiritual Intelligence Scale

To measure SI, in the second part of the instrument, the 24-item SI self-report questionnaire was used that was developed by King.[21] Psychometric evaluation of this questionnaire was done by Raghib et al.[22] The scale has 24 items in 4 dimensions, including critical existential thinking (7 items), personal meaning production (5 items), transcendental awareness (7 items), and conscious state expansion (5 items). Each item was scored on a 5-point Likert scale, including totally disagree = 0, disagree = 1, no opinion = 2, agree = 3, and totally agree = 4. The total scores of the questionnaire ranged from 0 to 96, and a higher score represents a higher SI. Cronbach's α of 0.89 indicated an acceptable internal consistency for the scale. In the current study, the reliability of this questionnaire was calculated using a pilot study with 25 samples. We obtained an intraclass correlation coefficient (ICC) value of 0.87 after a test–retest with an interval of 2 weeks.

Attitude Toward Fertility and Childbearing Scale

The third part of the instrument was the scale of Attitude toward Fertility and Childbearing Scale (AFCS)[23] that was designed by Soderberg et al. Validation of this scale was confirmed in Iran by Baezzat et al.[24] The AFCS includes 23 items and 4 subscales. The subscales include children as the base of life (8 items), the child as a barrier (6 items), postponing fertility to the future (5 items), and fertility after the fulfillment of preconditions (4 items). This scale is scored on a 5-point Likert scale from 0 = totally disagree to 4 = totally agree. The reliability of the scale (internal consistency and stability) was obtained using Cronbach's coefficient α and ICC, which were 0.79 and 0.89, respectively. The total scores of the questionnaire ranged from 1 to 115. Scoring the scale is based on mean score, and a higher score indicates a higher attitude toward fertility and childbearing.

Ethical Considerations

The research was approved by the Guilan University of Medical Sciences, Rasht, Iran (Approval no: IR.GUMS.REC.1402.082, Date: May 3, 2023). Written informed consent was obtained from participants who participated in this study.

Statistical Analysis

This study used quantitative measures such as percentages or means, and qualitative variables such as frequency (percentage). To compare

the mean scores and express them in terms of statistical significance, the Kruskal–Wallis, Spearman's correlation coefficient, and Mann–Whitney *U*-test were used. In addition, to determine what factors are related to SI and attitude toward fertility and childbearing, a multilinear regression was applied. To assess the normality of the distribution of data, the Shapiro–Wilk test was used. The Statistical Package for Social Sciences version 23.0 software (IBM Corp.; Armonk, NY, USA) was used to analyze the data. Consideration was given to the significance level of 0.05.

Results

About 199 women participated in the study. The mean score of the women age was 30.75 (SD = 7.00) years with a mean of marriage age of 25.01 (SD = 5.036) years. Most respondents were undergraduates (85.9%; n = 177), had no history of stillbirth or abortion, had one child (38.7%; n = 77), and used the Internet for 3-4 hours per day (49.7%; n = 99). Also, the majority (38.2%; n = 76) had a bachelor's degree (Table 1).

The mean total score of SI was 53.18 (SD = 9.88), which was desirable. The lowest and highest mean scores of SI were related to the dimensions of "personal meaning production" (10.80 ± 2.55) and "transcendental awareness" (15.77 ± 2.52), respectively. The mean total score of attitude toward fertility and childbearing was 54.94 (SD = 9.43), which was desirable. The lowest and highest mean scores of attitude toward fertility and childbearing were related to the dimensions of "fertility after the fulfillment of preconditions" 7.20 (SD = 2.25) and "child as a barrier" 21.49 (SD = 7.06), respectively (Table 2).

The total score SI and the total score attitude to fertility and childbearing had a significant positive relationship ($P = .049$, $r = 0.140$). With the increase in the total score of women's SI, the total score of their attitude toward fertility and childbearing generally increased. A significant positive relationship was observed between the total score of the attitude toward fertility and childbearing and the scores of the SI dimensions, including critical existential thinking ($P = .035$, $r = 0.150$) and conscious state expansion ($P = .034$, $r = 0.150$). However, there was no difference between the total score of the attitude toward fertility and childbearing and the other scores of the SI dimensions. In assessing the relationship between the total score of SI and the dimensions of attitude toward fertility and childbearing, a significant positive relationship was observed between the total score of SI and the score of children as the base of life ($P = .005$, $r = 0.197$) (Table 3).

There was a negative relationship between SI and age ($P = .000$), age of marriage ($P = .001$), and age of husband ($P = .001$) variables in univariate analysis.

So, with the increase in the age of women, their husbands, and the age of their marriage, the total score of SI decreased. There was a significant statistical association between the total score of SI and job ($P = .000$), ethnicity ($P < .001$), educational level ($P = .000$), husband's

Table 1. Demographic Characteristics of the Study Participants (n = 199)

Variables		N (%) / Mean ± SD	Variables		N (%)
Age		7.003 ± 30.75	Husband's educational level	Elementary school	0.5 (1)
				High school	8 (16)
Husband's age		6.702 ± 36.60		Diploma	36.2 (72)
Age of marriage		25.01 ± 5.036		Associate degree	24 (12.2)
History of stillbirths and abortions	No	171 (85.9)		Bachelor's degree	68 (34.9)
				Master's degree and higher	18 (9)
	Yes	28 (14.1)	Job	House keeper	64.3 (128)
Number of children	0	76 (38.2)		Self employed	2 (4)
	1	77 (38.7)		Employed	13.6 (27)
	≥2	46 (23.1)		Employed in medical group	10.1 (20)
Ethnicity	Gilak	151 (75.9)		work at home	9.5 (19)
	Persian	3 (1.5)		Others	0.5 (1)
	Talash	11 (5.5)	Husband's job	Self employed	101 (50.8)
	Turkish	28 (14.1)		Employee	61 (30.7)
	Kurd	5 (2.5)		worker	25 (12.6)
	Other cases	1 (0.5)		Employed in medical group	6 (12)
Husband's ethnicity	Gilak	131 (65.8)	Marital status	Married	194 (97.5)
	Persian	5 (2.5)		Divorce	2 (4)
	Talash	16 (8)		Widow	1 (0.5)
	Turkish	39 (19.6)	Economic status	Very good	2 (1)
	Kurd	5 (2.5)		Good	52 (26.1)
	Lor	1 (0.5)		Moderate	133 (66.8)
	Other cases	1 (2)		Bad	12 (6)
Duration of using the Internet and virtual networks	1-2	85 (42.7)	Place of residence	Rental	80 (40.2)
	3-4	99 (49.7)		Ownership	119 (59.8)
	≥5	15 (7.5)			
Educational level	Elementary school	1 (0.5)			
	High school	4 (8)			
	Diploma	36.2 (72)			
	Associate degree	12.1 (24)			
	Bachelor's degree	38.2 (76)			
	Master's degree and higher	9 (18)			

Table 2. Description of the Scores SI and Attitudes Toward Fertility and Childbearing in the Participants

Variables		Range	Observe Range	Mean (SD)	Median
Spiritual intelligence	Critical existential thinking	0-28	7-23	14.28 (2.86)	14 (13-16)
	Personal meaning production	0-20	5-21	10.80 (2.55)	11 (10-12)
	Transcendental awareness	0-28	7-22	15.77 (2.52)	16 (140.5-17)
	Conscious state expansion	0-20	5-24	12.31 (3.03)	12 (10-15)
	Total score	0-96	24-88	53.18 (9.88)	53 (49-59)
Attitudes toward fertility and childbearing	Children as the base of life	0-32	8-40	12.05 (4.92)	10 (9-14)
	Child as a barrier	0-24	6-30	21.49 (7.06)	23 (15-28)
	Postponing the fertility to future	0-20	5-23	14.19 (3.32)	15 (12-17)
	Fertility after the fulfillment of preconditions	0-16	4-15	7.20 (2.25)	7 (5-8)
	Total score	0-92	28-73	54.94 (9.43)	57 (50-63)

job ($P = .000$), husband's educational level ($P = .000$), income ($P = .000$), and place of residence ($P = .000$). In this regard, the mean total score of SI in women who were housekeepers, of Talesh ethnicity, with high school education, and whose husbands were workers with high school education, was higher than others. Also, women with low income and rented housing status had higher SI scores than the other women. The mean score of attitude toward fertility and childbearing, the number of children ($P = .033$), ethnicity ($P < .003$), and their husbands ($P < .005$), educational level ($P < .001$), job ($P < .001$), job of their husbands ($P = .004$), husband's level ($P = .000$), income ($P = .000$), and place of residence ($P = .013$) had a significant negative relationship.

In this regard, the mean score of attitudes toward fertility and childbearing in women who had one child, Turkish ethnicity, a high school educational level, and those who were housekeepers was higher than that of other women. Also, women whose husbands had Turkish ethnicity, a high school educational level, and were workers, had a higher attitude toward fertility and childbearing than others (Table 4).

According to the multivariate analysis, the coefficient of determination (R2) was 0.357, which indicates that 35.7% of changes in the total the score of SI were explained by the demographic characteristics of the women, including education ($b = -3.773$, $P = .000$), place of residence ($b = -3.685$, $P = .012$), and income ($b = 3.309$, $P = .008$). Regarding the attitudes toward fertility and childbearing, the coefficient of determination (R2) was 0.208, which indicates that 20.8% of the changes in the total score of attitudes toward fertility and childbearing were explained by the duration of using the Internet and virtual networks ($b = -3.298$, $P = .002$) (Table 5).

Discussion

This study aims to determine the relationship between SI and attitudes toward fertility and childbearing in reproductive-age women.

The results show that the mean scores of SI and attitude towards fertility and childbearing were desirable. The dimension of personal meaning production and transcendental awareness was associated with the lowest and highest mean SI scores in the present study.

The reason for the difference between the results of the current study and the study of Shirzadi et al,[25] may be the difference in the demographic characteristics of the studied population. In Shirzadi's study, women's divorce was the exit criterion, and the lowest level of education for women was a diploma.

In the current study, the lowest and the highest mean scores of attitude toward fertility and childbearing were related to the dimensions of "fertility after the fulfillment of preconditions" and "child as a barrier" respectively. In the study of Alijanzadeh et al,[26] the lowest score of attitude toward fertility and childbearing was related to the field of fertility after fulfilling the preconditions, in line with the present study, and the highest score was related to the dimension of children as the base of life, inconsistent with the results of the present study. It seems this contradiction in the results can be due to the differences in the sample size, the method of data collection (online platform), culture, and ethnicity of the participants.

The results of the study showed the existence of a positive relationship between SI and attitude toward fertility and childbearing. In the study of Zadehahmad et al,[27] the tendency to childbearing had a significant correlation with spiritual health.

Khadivzadeh et al[28] said that an increased tendency towards early and high fertility was related to higher levels of religious beliefs.

Rad et al[29] reported that religion is the strongest predictor of women's fertility tendency. A positive relationship between student fertility preferences and spiritual health has also been reported in the study of Movahedi Shakib et al.[30]

Table 3. Relationship of SI Scores with Attitudes Toward Fertility and Childbearing Scores

SI	Children as the Base of Life	Total Score Child as a Barrier	Postponing the Fertility to Future	Fertility after the Fulfillment of Preconditions	Total Score
Critical existential	$r = 0.290$	$r = -0.007$	$r = 0.033$	$r = 0.043$	$r = 0.150$
Thinking	($P = .000$)	($P = .926$)	($P = .641$)	($P = .549$)	($P = .035$)
Personal meaning	$r = 0.157$	$r = 0.064$	$r = 0.013$	$r = 0.018$	$r = 0.127$
production	($P = .027$)	($P = .370$)	($P = .858$)	($P = .801$)	($P = .074$)
Transcendental	$r = 0.199$	$r = -0.038$	$r = -0.014$	$r = -0.005$	$r = 0.063$
Awareness	($P = .005$)	($P = .597$)	($P = .844$)	($P = .948$)	($P = .378$)
Conscious state	$r = 0.026$	$r = 0.171$	$r = 0.105$	$r = -0.031$	$r = 0.150$
Expansion	($P = .716$)	($P = .016$)	($P = .140$)	($P = .663$)	($P = .034$)
Total score	$r = 0.197$	$r = 0.051$	$r = 0.036$	$r = 0.003$	$r = 0.140$
	($P = .005$)	($P = .473$)	($P = .612$)	($P = .968$)	($P = .049$)

Spearman's rank correlation coefficient.

Table 4. Relationship between Scores of SI and Attitudes Toward Fertility and Childbearing with the Demographic Characteristics

Variables		SI Mean rank / *r*	SI *P*	Attitudes Toward Fertility and Childbearing Mean rank / *r*	Attitudes Toward Fertility and Childbearing *P*
Age		−0.253	.000†	0.004	.950†
Husband's age		−0.244	.001†	−0.009	.901†
Age of marriage		−0.229	.001†	−0.029	.688†
History of stillbirths and abortions	No	100.83	.614*	99	.545*
	Yes	94.91		106.11	
Number of children	0	95.93	.216**	86.44	.033**
	1	108.79		108.76	
	≥2	92		107.74	
Ethnicity	Gilak	95.97	.083**	91.48	0.003**
	Persian	90.50		114.83	
	Talash	140.45		132.32	
	Turkish	112.80		135.25	
	Kurd	80.90		86.50	
	Other cases	28.50		65.50	
Husband's ethnicity	Gilak	90.72	.001**	93.11	.005**
	Persian	55.90		48.30	
	Talash	141.16		117/78	
	Turkish	123.24		127.54	
	Kurd	91.80		86.60	
	Lor	136.50		77	
	Other cases	37.75		46	
Duration of using the Internet and virtual networks (hour)	1-2	90.14	.109**	109.22	.077**
	3-4	106.77		95.54	
	≥5	111.20		77.20	
Economic status	Very good	42.25	.000**	112.25	.885**
	Good	73.14		95.40	
	Moderate	104.90		100.96	
	Bad	171.54		107.25	
Educational level	Elementary school	150.50	.000**	62.50	.001**
	High school	180.88		133.38	
	Diploma	131.52		116.36	
	Associate degree	74.94		104.06	
	Bachelor's degree	80.21		89.36	
	Master's degree and higher	52.14		57.14	
Husband's Educational level	Elementary school	24.50	.000**	6.50	.004**
	High school	165.88		132.22	
	Diploma	111.81		110.59	
	Associate degree	113.77		107.23	
	Bachelor's degree	79.66		85.62	
	Master's degree and higher	56.89		78.89	
Job	House keeper	111.35	.000**	110.90	.001**
	Self employed	108.75		77.13	
	Employed	76.83		80.59	
	Employed in medical group	55.25		56.68	
	Work at home	106.18		106.95	
	Others	15		55	
Husband's job	Self employed	113.32	.000**	103.10	.013**
	Employee	71.25		99.43	
	Worker	133.16		112.98	
	Employed in medical group	64.96		49.71	
Marital status	Married	99.65	.823**	101.41	.050**
	Divorce	117.75		30.25	
	Widow	97		105	
Place of residence	Rental house	130.44	.000*	101.54	.757*
	Ownership	79.54		98.97	

†Spearman correlation coefficient; *Mann–Whitney *U*-test; **Kruskal–Wallis.

Nevertheless, Firoz et al's[31] study indicates that religious beliefs do not affect fertility tendencies, in contrast to what has been found in this study. The contradiction in these results can be due to different types of study design, larger sample size, and cultural, social, and economic differences that affect women's fertility behaviors. In the assessments conducted by the researchers, in none of the mentioned studies, the relationship between SI and attitudes toward fertility and childbearing was not examined. In contrast, in the present study, there is a positive relationship between the total score of SI and the total score of attitudes toward fertility and childbearing in the study participants. This shows with the increase in the total score of women's SI, the total score of their attitude toward having children generally increased.

In this study, with the increase in the level of education, the total score of SI significantly decreased. So for one unit increase in education level, the total score of SI decreased by 3.773 units. In the study by Mohammadi et al,[32] higher SI was found in women with lower levels of education compared to those with higher educational attainment. This finding is a cause for concern, and therefore spiritual education seems to be necessary and mandatory, especially for people with a university education.

In this study, the total scores of SI in women with rental houses were higher than in women who had ownership. In the study by Chenarani et al,[33] SI and the state of residence have not been closely related. The possible reason for this discrepancy may be due to the difference in the type of SI questionnaire as well as the study population. The studied community was students (both male and female), but in the present study, only women of reproductive age were recruited.

With the increasing income, the total score of SI significantly increased. So for a unit increase in income, the total score of SI increased by 3.309 units. No significant relationship between income and solvency, which is not consistent with the results of this study, has been identified by Mohammadi et al.[32]

The findings showed that only the duration of using the Internet had a significant relationship with attitudes toward fertility and childbearing. For each unit increase in the duration of using the Internet and virtual networks, the total score of attitudes toward fertility and childbearing decreased by 3.298 units. However, there was no significant relationship between the variables of number of children, ethnicity of women and their husbands, education and job of women

Table 5. Factors Related to SI and Attitudes Toward Fertility and Childbearing in Participants Using Multivariate Linear Regression

Variables		*b*	SE	β	*t*	*P*
SI	Age	–0.276	0.200	0.195	–1.380	.169
	Husband's age	0.105	0.180	0.071	0.586	.558
	Age of marriage	0.153	0.165	0.078	0.926	.356
	Duration of using the Internet and virtual networks (hour)	0.381	0.968	0.024	0.394	.694
	Ethnicity	–0.449	0.574	–0.058	–0.782	.435
	Husband's ethnicity	0.449	0.513	0.073	0.972	.332
	Educational level	–3.773	0.811	−0.436	−4.650	.000
	Husband's educational level	0.700	0.771	0.085	0.907	.366
	Job	0.293	0.473	0.043	0.619	.536
	Husband's job	–0.291	0.605	–0.031	–0.482	.631
	Economic status	3.309	1.235	0.188	2.679	.008
	Place of residence	–3.685	1.444	–0.183	–2.552	.012
Attitudes toward fertility and childbearing	Number of children	1.04	0.902	0.085	1.153	.250
	Ethnicity	0.927	0.605	0.125	1.532	.127
	Husband's ethnicity	0.081	0.537	0.012	0.150	.881
	Duration of using the Internet and virtual networks (hour)	–3.298	1.060	–0.216	–3.110	.002
	Educational level	–1.341	0.906	–0.162	–1.480	.141
	Husband's educational level	0.167	0.791	0.021	0.211	.833
	Job	–0.469	0.499	–0.073	–0.939	.349
	Husband's job	–0.846	0.631	–0.096	–1.340	.182
	Total score of SI	0.110	0.073	0.115	1.506	.134

and their husbands, and attitudes toward childbearing. In Azmoude et al's[34] study, education had no significant relationship with attitudes toward fertility and childbearing. However, a significant relationship was observed between the duration of using the Internet and virtual networks and attitudes toward fertility and childbearing, which is consistent with the results of the current study.

Study Limitations and Strenghts

The study results help clarify the relationship between SI and attitudes toward fertility and childbearing in women. With this knowledge, healthcare providers can identify issues related to childbearing that could affect the population rate. Furthermore, healthcare providers can help women overcome their negative attitudes toward fertility and childbearing through techniques for SI improvement.

Our research might have the following limitations: the participants consisted of women of reproductive age. To examine the generalizability of findings, it would be useful for future studies to include a more ethnically/racially and sexually diverse sample, as well as community samples. This study used self-report measures and may be subject to social desirability.

This study utilized a cross-sectional, correlational design; thus, the temporal ordering of the variables explored in this study remains unclear. Longitudinal studies are needed to confirm that changes in SI precede attitudes toward fertility and childbearing.

Conclusion

The mean total score of SI was at a high level. The lowest and highest mean scores of SI were related to the "personal meaning production" and "transcendental awareness" dimensions, respectively. The mean total score of attitude toward fertility and childbearing was high. The lowest and highest mean scores of attitude toward fertility and childbearing were related to the "fertility after the fulfillment of preconditions" and "child as a barrier" dimensions, respectively. There is a significant positive relationship between SI and the attitude toward fertility and childbearing. With the increase in the total score of women's SI, the total score of their attitude toward fertility and childbearing generally increased. A significant positive correlations were observed between the total score of the attitude toward fertility and childbearing and the scores of the SI dimensions, including critical existential thinking and conscious state expansion. However, there was no difference between the total score of the attitude toward fertility and childbearing and the other scores of the SI dimensions. In assessing the relationship between the total score of SI and the dimensions of attitude toward fertility and childbearing, a significant positive relationship was observed between the total score of SI and the score of children as the base of life.

The mean total score of SI in women who were housekeepers, of Talesh ethnicity, with a high school education, and whose husbands were workers with a high school education, was higher than others. Also, women with low income and rented housing status had higher SI scores than the other women. The mean score of attitude toward fertility and childbearing, as well as the number of children, ethnicity, educational level, job, occupation of women and their husbands, income, and place of residence, had a significant negative relationship.

In this regard, the mean score of attitudes toward fertility and childbearing in women who had one child, Turkish ethnicity, a high school educational level, and those who were housekeepers was higher than that of other women. Also, women whose husbands had Turkish ethnicity, a high school educational level, and were workers had a higher attitude toward fertility and childbearing than others.

Ethics Committee Approval: The research was approved by the Research Ethics Committee of Guilan University of Medical Sciences, Rasht, Iran (Approval no: IR.GUMS.REC.1402.082, Date: May 3, 2023).

Informed Consent: Written informed consent was obtained from participants who participated in this study.

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